AMERICAN DECLINE OR RENEWAL?

HEARINGS

BEFORE THE

SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT

COMMITTEE ON SCIENCE AND TECHNOLOGY

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AMERICAN DECLINE OR RENEWAL?— GLOBALIZING JOBS AND TECHNOLOGY

THURSDAY, MAY 22, 2008

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT,
COMMITTEE ON SCIENCE AND TECHNOLOGY,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:05 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Brad Miller [Chairman of the Subcommittee] presiding.

BART GORDON, TENNESSEE
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RALPH M. HALL, TEXAS
RANKING MEMBER

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Subcommittee on Investigations and Oversight

Hearing on

American Decline or Renewal? – Globalizing Jobs and Technology

Thursday, May 22, 2008
10:00 a.m. – 12:00 p.m.
2318 Rayburn House Office Building

Witness List

PANEL I

Dr. Ralph E. Gomory
Research Professor, NYU Stern School of Business, Henry Kaufman Management Center

Dr. Margaret Blair
Professor of Law, Vanderbilt University Law School

Dr. Bruce R. Scott
Paul Whiton Cherington Professor of Business Administration, Harvard Business School

PANEL II

Mr. James R. Copland III
Chairman, Copland Fabrics, Burlington, NC

Mr. Brian O'Shaughnessy
Chairman, Revere Copper Products, Inc., Rome NY

Mr. Wes Jurey
President & CEO, Arlington Chamber of Commerce, Arlington, TX

HEARING CHARTER

SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT
COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

American Decline or Renewal?—Globalizing Jobs and Technology

THURSDAY, MAY 22, 2008
10:00 A.M.–1:00 P.M.
2318 RAYBURN HOUSE OFFICE BUILDING

Purpose:

The purpose of this hearing is to assess the effects of the globalization of jobs and technology on the American economy, and to develop an understanding of the incentives and disincentives that influence United States firms' decisions on whether to locate at home or abroad the production and research facilities that are critical sources of value creation and high-paying jobs. Firms' thinking both on whether to retain or to offshore existing U.S.-based capacity and on where to locate new investment will be explored.

The Committee on Science and Technology annually authorizes the expenditure of billions of dollars to support scientific research. It therefore has a direct interest in the extent to which the benefits of the innovations spawned by this federal funding are captured by the U.S. national economy and for the taxpayers with whom the funding originates. The Committee has a specific interest, through its connection to the National Institute of Standards and Technology, whose budget it authorizes, in the health of the Nation's manufacturing industries. Finally, the vigor of the Nation's scientific research enterprise, like the health of the economy that supports it, is closely linked to its ability to sustain value creation—in the form of both technological innovation and high-value added production—within its borders.

This hearing has been designed to help the Committee in identifying measures that might increase the likelihood of high-value-added activity's remaining, increasing, and succeeding within U.S. borders, and thereby contributing to the future health of the America's economy and the future prosperity of its citizens.

Witnesses:

Panel One

Dr. Ralph E. Gomory currently serves both as Research Professor at the NYU Stern School of Business and as President Emeritus of the Alfred P. Sloan Foundation. A mathematician who was a longtime Director of Research at IBM, he is author with the economist William J. Baumol of the book *Global Trade and Conflicting National Interests.*

Dr. Margaret M. Blair is a Ph.D. economist who serves as Professor of Law at Vanderbilt University Law School. She is the author of numerous scholarly articles on corporate governance and of the book *Ownership and Control: Rethinking Corporate Governance for the Twenty-First Century.*

Dr. Bruce R. Scott is the Paul Whiton Cherington Professor of Business Administration at Harvard Business School. One of the founders of the competitiveness debate in the 1980s, he has a new book, *Capitalism, Democracy, and Development,* due to be published in October.

Panel Two

Mr. James R. Copland III is the Chairman of Copland Industries, Inc., and Copland Fabrics, Inc., located in Burlington, NC; he served as the companies' President, Treasurer, and CEO from 1986 until 2004. He is also the founder of two banks and currently serves as Director of four banks.

Mr. Brian O'Shaughnessy has been Chairman since 1988 of Revere Copper Products, Inc., in Rome, NY, and until recently served as President and CEO as well. He also serves on the Board of Directors of the Coalition for a Prosperous America,

three copper industry trade associations, and three manufacturing associations in New York State.

Mr. Wes Jurey is the President and CEO of the Arlington Chamber of Commerce in Arlington, TX. He founded the Center for Workforce Training & Preparation in El Paso, TX, and currently serves as Chair of the U.S. Chamber's Institute for a Competitive Workforce and as a member of the Texas Workforce Investment Council.

Chairman MILLER. Thank you to all of you, and welcome to this interesting hearing today, *American Decline or Renewal?—Globalizing Jobs and Technology.* The jurisdiction for Oversight is more indulgent than the jurisdiction the Committee has for legislation. If this committee tried to claim jurisdiction for legislation coming out of any of the discussions today, we probably would be in a death struggle with other committees that would probably win that struggle, but part of our jurisdiction is to consider American competitiveness generally. There are several items in our jurisdiction that give us that broader authority at least to think about how American business needs to be more competitive, and much of the Committee's work in the last two years has been on that subject. And certainly this hearing today gets at that subject as well.

The former Vice Chairman of the Federal Reserve Board, Alan Blinder, observed, "What I've learned is anyone who says anything that obliquely sounds hostile to free trade is treated as an apostate." Actually, that apostasy is very welcome in parts of my district that has suffered a great deal of job loss in the last decade, in the last generation.

The faith that Blinder has recently begun to question himself has guided both our policy and international economic policy for more than two decades. Its credo is that lowering trade barriers while curbing regulation produces the greatest growth. According to its doctrine, this new order would provide undiluted benefits to an advanced nation like ours. It would free Americans trapped in traditional jobs for more sophisticated, remunerative work, while flooding the world with goods and services made in the United States. I represent a lot of folks who do not feel that they were trapped in traditional jobs but really wish they still had those jobs.

But 15 years after the ratification of NAFTA and 13 years after the birth of the WTO, the ranks of the doubters seem to be growing.

Could this reflect America's net loss of 3.5 million manufacturing jobs since 2001? Many workers have been freed from being trapped in traditional jobs, but have not found other jobs that are as well-paid, or as easy to support themselves and a family on as the jobs that they lost.

Could it reflect the fact that the United States' merchandise trade deficit has risen every year but one over the last decade and has hovered around three-quarters of a trillion dollars for three years running? Our trade surplus in services is tiny by comparison. In 2007, it was only around one-eighth the goods deficit's size.

Could this reflect the Nation's assumption since 2001 of $10 trillion in new debt, $6.5 trillion by households, $3.5 trillion by the Federal Government? Is that an indication that we have not produced anywhere near the level at which we would like to consume?

Could it reflect anxiety over the rise of colossal sovereign wealth funds that are using what they take in from us to buy up our industrial and financial assets?

In this context, the hardships of working Americans are proving longer lasting and are deeper. Lawrence Summers, the Treasury Secretary under President Clinton and before that, Chief Economist of the World Bank, a strong supporter of globalization in the past, last month wrote of "a world where Americans can legiti-

mately doubt whether the success of the global economy is good for them." He also acknowledged that "growth in the global economy encourages the development of stateless elites whose allegiance is to global economic success and their own prosperity rather than the interests of the Nation where they are headquartered."

When even folks like Summers, one of the architects of the current international trading system, are now feeling and saying out loud concerns like that, it heralds a significant change in the public debate on the global economy and the values of the global economy to American workers. No longer can we in good conscience avoid the question, what are we to do about it? If we are to find effective answers, we must be open to new ideas, even ideas that might have seemed apostasy in the past. We must be prepared to discover that we know less than we thought about the consequences of globalization or even that some of our basic views on the subject may rest on mistaken assumptions.

The panelists in the first panel today point out that much of our economic theory is built on a society in which the baker sells his bread to the candlestick maker who sells his candles to the miller who sells his flour to the baker. And with the kind of size, the kind of capital, the kind of labor force required for the economy today, that may not be the best model. It may not be one that truly describes the economy of the world that exists now.

We have two panels, each of which will, in its own way—in different ways—help us consider these apostate ideas.

The first panel will offer their perspectives on the beliefs that have, for several generations, shaped the design and governance of our world trading system, as well as our expectations of proper behavior by corporations. One of the members of the panel, Dr. Ralph Gomory, last year testified before the Science and Technology Committee that the interests of U.S.-based multinational corporations are no longer necessarily in step with those of a healthy American economy, certainly an apostate idea. Today the members of this panel will question things we think we know, about the role and responsibilities of corporations, about the relationship of the state and the market, about the ability of technological innovation to ensure our country's economic prosperity in the absence of changes in the trading system. And they will suggest some measures that might strengthen America for the future.

The second panel is testimony from the trenches. Two heads of domestic companies will talk about their commitment to producing at home, what they do out of concern for the well-being of their employees, the viability of the communities in which their businesses are located, and the sustainability of the Nation's economy. They will tell us about the cost of upholding that commitment under the current trading system and suggest how the Federal Government might help lighten their burdens now. Joining them is a regional development expert who will explain what it takes to attract investment as the lure of off-shoring becomes more prevalent, and will add some ideas of his own about how to improve American competitiveness.

I will yield back the balance of my time which expired a long time ago and recognize now the distinguished Ranking Member, not Mr. Sensenbrenner, but Mr. Hall for his opening statement.

[The prepared statement of Chairman Miller follows:]

PREPARED STATEMENT OF CHAIRMAN BRAD MILLER

"What I've learned," former Fed Vice Chairman Alan Blinder has observed, "is anyone who says anything even obliquely that sounds hostile to free trade is treated as an apostate."

The faith that Blinder has recently begun to question has guided both U.S. and international economic policy for more than two decades. Its credo is that lowering trade barriers while curbing regulation produces optimal growth. According to its doctrine, this new order would provide undiluted benefit to an advanced nation like ours. It would free Americans trapped in traditional jobs for more sophisticated, remunerative work, while flooding the world with goods and services made in the U.S.A.

But 15 years after the ratification of NAFTA, and 13 years after the birth of the WTO, the ranks of the doubters seem to be growing.

- Could this reflect America's net loss of 3.5 million manufacturing jobs since 2001?
- Could it reflect the fact that the U.S. merchandise trade deficit has risen every year but one over the past decade, and has hovered around three-quarters of a trillion dollars for three years running? By the way, our trade surplus in services is tiny in comparison. In 2007, it was only around one-eight the goods deficit's size.
- Could this reflect the Nation's assumption since 2001 of $10 trillion in new debt, $6.5 trillion by households, $3.5 trillion by the Federal Government—an indication that we have not produced anywhere near the level at which we wish to consume?
- Could it reflect anxiety over the rise of colossal Sovereign Wealth Funds that are using what they take in from us to buy up our industrial and financial assets?

In this context, the hardships of working Americans are proving enduring and profound. Lawrence Summers—Treasury Secretary under President Clinton and, before that, Chief Economist of the World Bank—last month wrote of "a world where Americans can legitimately doubt whether the success of the global economy is good for them." He also acknowledged that "growth in the global economy encourages the development of stateless elites whose allegiance is to global economic success and their own prosperity rather than the interests of the Nation where they are headquartered."

That even such a figure as Summers, one of the architects of the current international trading system, is now expressing such concerns heralds a significant change in public discourse on the global economy. No longer can we in good conscience escape the question: What do we do about it? If we are to find effective answers, we must be open to hearing new ideas. We must be prepared to discover that we know less than we thought about the consequences of globalization, or even that some of our basic views on the subject may rest on mistaken assumptions.

Today we have two panels, each of which will, in its own way, help us along this path.

The first panel will offer new perspectives on the beliefs that have, for several decades, underlain the design and governance of the world trading system, as well as our expectations of proper behavior by corporations. One of its members, Dr. Ralph Gomory, last year testified before the Science and Technology Committee that the interests of U.S.-based multinational corporations are no longer necessarily in step with those of a healthy American economy. Today the members of this panel will question things we think we know—about the role and responsibilities of corporations, about the relationship of the state and the market, about the ability of technological innovation to ensure our country's economic prosperity in the absence of changes in the trading system. And they will suggest some measures that might strengthen America for the future.

The second panel will bring us into the trenches. Two heads of domestic firms will talk about their commitment to producing at home, which they do out of concern for the well-being of their employees, the viability of their communities, and the sustainability of the Nation's economy. They will also tell us about the cost of upholding that commitment under the current trading system, and suggest how the Federal Government might help lighten their burdens now. Joining them is a regional development expert who will explain what it takes to attract investment as the lure

of offshoring becomes more prevalent, and will add some ideas of his own on how to improve American competitiveness.

With that I yield back my time—which has, in fact, already expired—and recognize the distinguished Ranking Member for his opening statement.

Mr. HALL. Thank you, Chairman Miller, and you very adequately gave an opening statement that covers I think everything that ought to be covered, and I am not here to take Mr. Sensenbrenner's place. I'm just here to carry out the bylaws that there has to be a Minority here before he can hit that gavel down and we get started hearing your testimony. But don't be alarmed that for the lack of Members that are here. And Mr. Sensenbrenner is not here because he fell yesterday, and the good news is that he was not badly injured. He is all right, and he will be back with us shortly.

But all the empty seats, most all of us have about three or four things to do every hour of the day here; and your testimony under the Chairman's guidance is taken down. It is even being televised, and everybody in the Congress will read it and see it. So you are not talking to the empty chairs. You have the most important people, staffers back here, that tell us what you said, you know, when we get back to our offices. But I won't even be here very long, but I have great admiration for the Chairman, and I know he is going to handle it well. I yield back my time. I ask unanimous consent to put my opening statement in the record.

Chairman MILLER. Certainly, without objection.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF REPRESENTATIVE RALPH M. HALL

Today's hearing will address a topic that this committee has looked at several times in the past year—globalization. This new global marketplace has created many opportunities and challenges that corporations, governments, and workers must now adapt to. Today's hearing will touch on a number of broad issues both in and out of this committee's jurisdiction.

While our thinking should not be limited by such artificial boundaries, we should, however, be cognizant of what we can actually affect. STEM education and Federal Research and Development are clearly topics that this committee should address. From the National Academies *Rising Above the Gathering Storm* report, to the President's American Competitiveness Initiative, to this committee's COMPETES Act, this committee is actively engaged in maintaining America's preeminence in Science and Technology. It is in these areas that we can continue to influence how our nation responds to a globalized economy.

I look forward to the witness' comments on other topics such as currency manipulation, subsidization, corporate governance, price fixing, regulatory policy, patent reform, and tort reform. These issues are certainly an important aspect of globalization, but ultimately may not be the most appropriate topics for the Science Committee to address. Nevertheless, much like the intertwined global economy, many of these issues are also interrelated so I look forward to hearing our guests' perspectives.

Thank you. I yield back the balance of my time.

Chairman MILLER. I hope the Members did not really believe that every Member of Congress is going to read the transcripts of today's hearings, but I do still think, even if a relatively small number of people even learn in the most general terms what was discussed, it will advance the debate and allow us to consider these questions in ways we haven't before but need to.

And I ask unanimous consent that all additional opening statements submitted by any Member be included in the record. And without objection, it is so ordered.

[The prepared statement of Mr. Costello follows:]

PREPARED STATEMENT OF REPRESENTATIVE JERRY F. COSTELLO

Chairman Miller, thank you for your continued attention to one of the most important issues facing our nation. The changing nature of the international economy has had profound effects on the American workforce. How we confront the long-term effects of this phenomenon is critically important for our future economic health.

It is a familiar refrain over the last 15 years: more jobs, particularly manufacturing jobs, have left the U.S. and gone overseas, where workers are paid substantially less. And this activity has not been limited to blue collar jobs. As China and India produce more and more engineers and other high-tech workers—that also work for less than their American counterparts—white collar jobs are lost abroad.

While our economy slows and rising food and gas prices are squeezing families, the average American worker's wages have stagnated, and most manufacturing workers that lose their jobs make less in their next job.

Our country's success has been underpinned to a great degree by the fact that a person without a college education could find a good-paying job, enough to raise a family, afford an occasional vacation, and generally live a higher standard of living than his parents.

For many Americans, that ideal is in jeopardy. Service sector jobs do not pay as well as manufacturing jobs, and often come without benefits. While our economy remains the most innovative in the world, not everyone will be able to acquire the skills to survive the demands of the 21st Century workforce. My overarching question to our panelists is, how do we rebuild the U.S. job base?

Mr. Chairman, thank you for holding this hearing. I look forward to the insights of our witnesses and appreciate their taking the time to discuss these issues with us today.

[The prepared statement of Ms. Johnson follows:]

PREPARED STATEMENT OF REPRESENTATIVE EDDIE BERNICE JOHNSON

Thank you, Mr. Chairman. I want to commend this subcommittee's work on today's hearing.

The topic is of great interest: an in-depth analysis of the incentives and disincentives when it comes to global outsourcing of high technology jobs.

A simple Internet search for global outsourcing in Texas yields several large corporate business names.

These businesses advertise themselves as being proficient and helping other businesses outsource their work, globally.

Mr. Chairman, I believe that as information technology continues to improve, that global outsourcing will be the way business is done. This trend will become ever more routine.

My concern is regarding which jobs stay in the United States, and which jobs go to other nations.

Science, technology, and engineering jobs are among the higher paying, more rewarding ones. The fruits of this work pay untold dividends to a society.

There will always be a place, here and abroad, for attorneys, manufacturers, teachers, bankers, and business people. These can be high-paying and valuable professions.

I believe that STEM jobs—those involving science, technology, engineering and mathematics—present critical sources of value creation and prosperity to individuals and to society.

Let us use Silicon Valley, for an example. Had the Internet boom occurred initially in India, would that nation now surpass us in computer science innovation?

Some would argue that, in some sectors, it is already doing so.

I am pleased that our witnesses bring expertise from the academic standpoint as well as the business perspective.

Hopefully, the information will enable the Subcommittee to get a sense of decision-making that goes into firms' thinking both on whether to retain or to offshore existing U.S.-based capacity and on where to locate new investment.

Thank you, and I yield back.

Chairman MILLER. It is now my pleasure to introduce our witnesses today. The first is Dr. Ralph Gomory who currently serves as a Research Professor at the NYU Stern School of Business and is President Emeritus of the Alfred P. Sloan Foundation. Dr. Margaret Blair is a Ph.D. economist who serves as Professor of Law at Vanderbilt University School of Law. Dr. Bruce Scott is Paul

Whiton Cherington Professor of Business Administration at the Harvard Business School. You will each have five minutes for your oral testimony. Your written testimony will be included in the record for the hearing. When you complete your testimony, we will begin with questions. Each Member will have five minutes to question the panel. As this is an Investigations and Oversight Subcommittee, it is our practice to take testimony under oath. The likelihood of a perjury prosecution coming out of this hearing seems remote, but we do still take testimony under oath.

Do any of you object to being sworn? All right. And you also are allowed counsel if you prefer. We ask you these questions to put you at ease.

Ms. JOHNSON. Mr. Chairman?

Chairman MILLER. Yes, Ms. Johnson?

Ms. JOHNSON. Pardon me for breaking in but I have a markup starting at 10:30——

Chairman MILLER. Yes, ma'am.

Ms. JOHNSON.—and I notice on the witness list here there is someone from my area, the President and CEO of Arlington Chamber of Commerce, and I simply want to welcome him and then reiterate Mr. Hall's comment about us getting the information even if we are not here. But I do have a markup.

Chairman MILLER. Ms. Johnson, would you like to introduce—he is on the second panel, but if you would like to introduce him now that would be fine.

Ms. JOHNSON. I don't even know him.

Chairman MILLER. Well, thank you. I will be pleased to welcome him for you and for the rest of the panel, and I wish you well at your markup.

And none of you have counsel? All right. If you would now all rise and raise your right hand, do you swear to tell the truth and nothing but the truth? Thank you. The record will reflect that all answered that they did so swear.

Dr. Gomory, you may begin. You do need to turn on your microphone.

Mr. GOMORY. I am sorry.

Panel I:

STATEMENT OF DR. RALPH E. GOMORY, RESEARCH PROFESSOR, NEW YORK UNIVERSITY STERN SCHOOL OF BUSINESS; PRESIDENT EMERITUS, THE ALFRED P. SLOAN FOUNDATION

Dr. GOMORY. I am here just representing myself, not the Sloan Foundation, not New York University. For myself, let me say how pleased I am to have this opportunity to discuss these crucial issues, and I thank you, Mr. Chairman, and Members of the Committee for having organized this hearing.

I will make only one basic point in my testimony, and that is that in this era of globalization, the interest of global corporations and their countries have diverged; and if most Americans are to benefit from globalization, we must change this situation and there are ways to do that.

After all, what is it that countries want of their corporations? I say two things. One, countries have looked to their corporations to be productive at making what they make, and second, to enable the people of the country to earn a living by being a part of these productive organizations.

Now, if we look at the behavior of corporations, it is clear that profit is something that really matters to corporations. Globalization has now made it possible for global corporations to pursue their profits by building capabilities abroad and instead of investing along side U.S. workers and using that investment in R&D and all the rest to increase their productivity, corporations today can produce goods and services abroad using low-cost labor and import those goods and services into the United States.

But increasing their profits this way, they are not fulfilling the social purpose of allowing Americans to participate in the production of goods. Economists correctly point out that this often results in the availability of cheaper goods and that itself is a social good, and that is certainly true; but it is also true that as we lose our capabilities in many areas, we have less to trade for those goods so that eventually, the cheaper goods become expensive in real terms and you come out behind, not ahead.

The idea that the industrial development of your trading partner can actually become harmful to your total GDP has appeared in the economic literature from time to time. With a detailed understanding that Professor Baumol and I have added to that viewpoint in our book, there is a good reason to think that the rapid industrialization of some Asian countries is harmful to the United States overall, not just in some areas.

Now, let me say that U.S. corporations were not always purely profit oriented. When Reginald Jones became the CEO of General Electric in 1972, he announced that his responsibilities would be equally split among the company and its shareholders, its employees, the American industry, and the Nation; and that sense of broad responsibility was at that time—and I remember it myself—pervasive in American industry.

But in the years since then, that view of corporate leadership has been largely replaced by the idea that the business of business is solely to make profit for shareholders and that in the pursuit of profits or shareholder value, all other values should be sacrificed. And what has been the result of that?

During the three decades after 1973, GDP increased steadily as new technologies were introduced that increased productivity; but during this period, the gains from this increase were distributed in a very skewed fashion. Over those 30 years, most Americans have seen little or no growth in real wages. The gains from this impressive productivity growth have been going to the wealthy and, even among them, to the very wealthy primarily.

While many explanations have been brought forward for this remarkable divergence of the richer and poorer in our country, one very simple one has received little attention. But let us note that the shares of corporations are held overwhelmingly by those who are already wealthy. Ninety percent of shares are held by the top 20 percent or by those like top executives who will become wealthy if share values go up. And if corporations focus on share value to

the exclusion of anything else, this is an automatic mechanism for increasing inequality and the skewed distribution.

But with the onset of globalization, the capital, know-how, and technology that once made American workers the most productive in the world are being transferred overseas to other workers who will do the same job for a fraction of the wage. This makes for excellent corporate profits, but it leaves American workers out and it will leave most Americans as losers, not winners from globalization.

Can anything be done about this? The answer is yes, but we will have to do some new things. While the United States has no national stated strategy aimed at the goal of greater GDP, there is no lack of individual suggestions about ways to improve the U.S. economic situation. This often translates into asking for improved K through 12 education, et cetera, et cetera, et cetera; and I discuss all these in my written testimony. However, the main thrust of this testimony today is on the issue of better aligning corporate and national goals. We need to consider a U.S. economic strategy that provides incentives to companies to have high value-added jobs in the United States. If we want high value-added jobs, let us reward companies for having such jobs. Let us consider a corporate income tax that does that, and we don't care how they do it, whether it is through R&D, advanced technology, or by just plain American ingenuity exercised at every level. Such a tax could be revenue neutral, low on producers and high on the non-producers. Such a tax would encourage corporations to return to what a country wants of them, high output and jobs in this country.

Many people would oppose this or any similar move, saying that our national economic strategy is and should be to leave markets alone and take whatever free markets produce. But when you think for one second, you realize there is no one free market. All markets are affected by all our regulations and our tax structures. And so the question simply remains, which free market are you describing and which free market do you want?

However, we cannot do these things that I have described or anything effective if we do not balance trade. If we do not balance trade, we cannot be in control of our own destiny. We will continue to be the victims of merchantless practices and there is nothing to prevent U.S. corporations from leaving the country and working from abroad if they prefer that to what it means to be a U.S. corporation.

But trade can be balanced. There are many approaches to this, but in this limited time, I would only mention one, a remarkable approach described by Warren Buffet and based on what he calls import certificates.

If most Americans are to benefit rather than lose—let me summarize—if most Americans are to benefit rather than lose from globalization, we need to re-align the goals of corporations with those of the Nation, and we must balance trade to control our own destiny and there are ways to do both these things. Let us start now.

[The prepared statement of Dr. Gomory follows:]

PREPARED STATEMENT OF RALPH E. GOMORY

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to take part in this hearing. The subjects that we are to discuss today are the ones to which I have devoted much of my working life. For almost 20 years I was the head of the research effort of a major international corporation, (IBM). For the last 18 years I was the head of a major foundation (Alfred P. Sloan) deeply interested in science and technology. Today I am a Research Professor at New York University's Stern School of Business.

In addition, for almost my entire adult life, I have been active as an individual researcher—first in mathematics and more recently in economics. I am pleased and honored to be here today and to have this opportunity to testify.

Some of you may remember that I testified to the full Science and Technology Committee on June 12 of last year on the subject of the globalization of R&D. At that time I stated:

> The effect on the United States of the internationalization of the scientific and technical enterprise can only be understood as one part of the revolutionary process of globalization, which is fundamentally revising the relation of companies to the countries from which they have originated. In this new era of globalization the interests of companies and countries have diverged. *What is good for America's global corporations is no longer necessarily good for the American economy.*

My testimony today will bear on this same question, viewed in the broader context of the evolving relation of countries and companies. I will address the impact of these events on the overall ability of this country to produce a large GDP (value of the total national product), as well as on the rapidly growing problem of extreme inequality in the distribution of that national product. Nonetheless, my conclusion will be exactly the same:

What is good for America's global corporations is no longer necessarily good for the American economy.

To see why this is so, let us review the fundamental social role that the corporation fulfills in this country and in other developed countries.

The Basic Social Function of the Corporation

For a very long time most of the work of the world was done on farms or in small shops. An individual could learn the printing trade or shoe making and graduate to his own shop; a family could run a farm. In both cases an individual or very small groups of people could grow crops or make shoes that could be sold to others and thus have the money to supply what was not made at home.

But today the goods we consume cannot be made at home; they are complex and require large organizations to create them. You cannot manufacture a car in your garage; it takes a large-scale organization to do it. The food you eat is not produced by a family on a nearby farm, but is made by large organizations on highly mechanized farms with machinery produced by other large organizations. The food itself then travels on highly organized transportation networks to get to huge outlets, where nearby you can pick up a refrigerator made by another large organization or a television set that no individual or small group could ever build.

The same is true of services: there is no way to build your own telephone service. And even medicine, one of the last strongholds of the individual practitioner, is rapidly agglomerating into large-scale enterprises.

A person must now be part of an organization that makes or distributes the complex goods and services that people buy today. Being part of an organization is what people must do to earn a living and support themselves and their families. The fundamental social role of corporations and other businesses is to enable people to participate in the production of the goods and services that are consumed in the modern world; the corporation enables them to earn a share of the value produced for themselves and their families.

My testimony bears on the question of how well America's global corporations are fulfilling that fundamental purpose today. The whole thrust of my testimony is that in the last few decades the shift in corporate motivation toward emphasizing profits above everything else has had a deleterious effect on the way they are fulfilling that role. That deleterious effect is now being enormously accelerated through globalization.

The Role of Profits and Competition

Business organizations today do not proclaim the social mission that I have just described; rather, they make clear that they are there to make profits for their shareholders.

I understand very well that profit is a creative force. Companies come into existence to create profits, and to do that they create GDP, the goods and services that constitute a nation's economic output. And in constantly striving for more profits, companies tend to become ever more efficient and create ever more GDP. As Adam Smith pointed out, "It is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner, but from their regard to their own interest."

Today's butcher and baker are corporations, and their interest is profits.

But while it is true that profit can be a creative force it is also true that emphasizing profit above everything else can be bad for the Nation. Profit under the right circumstances can be an energizing force that creates GDP. But we should remember that from a national point of view, profit is a means to the end of creating GDP, not an end in itself.

The Divergence of the Profit Motive and the Fundamental Role

Globalization has now made it possible for global corporations to pursue their profits by building capabilities abroad. *Instead of investing alongside U.S. workers and using their investment and R&D to increase their productivity, corporations today can produce goods and services abroad using low-cost labor and import those goods and services into the United States.* But in creating their profits this way, they are building up the GDP of other countries while breaking their once tight links with America's own GDP.

Economists will sometimes argue that this development of capabilities abroad is good for the U.S. economy as a whole. For one thing, we get cheaper goods. That is certainly true, but it is also true that if we lose our superior capabilities in many areas and are less competitive, we have less to trade for those goods, so that eventually the cheaper goods become expensive in real terms. I do not intend to repeat today the arguments that I have already outlined to the Full Committee in my earlier testimony and that are spelled out in the book on global trade and its consequences that I co-authored with Professor Will Baumol.

I would like to point out, however, that the view that the industrial development in your trading partner can be harmful to your total GDP is not new. There is a long history of well known economists making that observation, most recently Paul Samuelson.[1] What Professor Baumol and I have added to that long history in our book *"Global Trade and Conflicting National Interests"* is the realization that the benefits of your trading partner's economic development occur in the early stages of its development, and as your partner becomes more fully industrialized and is no longer confined to low value-added industries, further development is harmful to your GDP.

This result, which we derive rigorously from the most standard economic models, corresponds to the intuitive notion that we do well when we lose low-wage jobs and not well when we start losing high-wage or high-tech jobs .And that is what we are seeing today. And as I said in my previous testimony, in agreeing with my co-panelist Professor Alan Blinder, there are many reasons to believe that the impact on the United States will be severe.

In addition to the impact on GDP, the Effect of Globalization on Inequality

Globalization was not the beginning of the divorce between corporate profits and the economic welfare of the American people. It is rather a very large next step down a long road already traveled. To see how far we have come, let us look back 35 years.

Reginald Jones became CEO of General Electric in 1972, and shortly thereafter made two remarkable speeches to the Business Roundtable and the National Press Club.[2]

Mr. Jones said that with his appointment as CEO, he would henceforth view his responsibilities as being equally split among the company and its shareholders, employees, American industry, and the Nation. This sense of broad responsibility became pervasive in American industry. In fact, urged on by Jones, the Business Roundtable—the organization of major company CEOs intended to look after the interests of business in the public policy arena—formally endorsed in 1981 the policy that shareholder returns had to be balanced against other considerations.

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[1] See References 1–6.

[2] This is summarized from Reference 7.

In the intervening years that view of corporate leadership has waned, largely replaced by the idea that the business of business is solely to make profits for shareholders, and that in the pursuit of profits, or shareholder value, all other values can be sacrificed.

In the decades from 1973 to now, GDP increased steadily as new technologies were introduced that increased productivity. If the gains in productivity had been reflected evenly in incomes, a typical worker would get 35 percent more today than in 1973. In fact, the typical worker saw a far smaller gain. Median *household* income grew about 16 percent since 1973, much of that gain being due to the fact that many households became two-earner households. So, instead of looking at households, if we look instead at individual workers—for example, men in the 35–40 age bracket—their inflation-adjusted wages have in fact decreased in real terms since 1973.

In fact the gains from productivity growth have been going to the rich—and even among the rich, primarily to the very rich—while most Americans have seen little or no growth in real wages.[3] While details can be disputed, as is the case with much economic data, the general trend toward a sharply increasing degree of inequality in incomes and wealth cannot be disputed; and we are seeing today a concentration of wealth at the very top, unmatched since the days of the so-called "robber barons" at the close of the 19th century.

And just to remove any ambiguity about what is going on, in 2004 the Business Roundtable revised its earlier position on CEO responsibility and publicly asserted that the obligation of business is only to maximize shareholder wealth.[4]

While many explanations have been brought forward for this divergence of the richer and the poorer in our country, one very simple one has received remarkably little discussion. Companies today are aimed primarily at maximizing shareholder gains, and their shares are held overwhelmingly by those who are already wealthy[5] or by those, like top executives, who will become wealthy if share values go up. Corporations today are motivated to cut wages and benefits whenever they can to increase profits and shareholder value. The money saved from wages and benefits comes out of the middle and lower income groups; the gain in profits goes to the wealthy.

As we remarked above, important American corporations have found that the easiest way to maximize shareholder wealth today is to take their technology, know-how and capital overseas to wherever labor is cheapest and subsidies are the greatest. The capital, know how and technology that once made American workers the most productive in the world are being transferred overseas to other workers who will do the same job for a fraction of the wage. This makes for good corporate profits, but it leaves American workers far behind. Corporate goals, as they are now being stated, have been diverging for a long time from what is good for the country. Now, however, that decades-long history of workers and more generally the middle class losing share in the productivity gains is being accelerated by globalization. In globalization, jobs leave the country altogether and only the corporate profits remain.

We need to realize that the interests of the American global corporation, whose interest is profit, and the interests of most Americans, who want a higher standard of living, have been diverging. Globalization is causing that divergence to occur faster and further than ever before.

Can Anything Be Done?

This testimony does not pretend to take on in any systematic way the task of answering the question, "What is to be done?" I will be content if I can contribute to the clarification of some of the issues.

While the United States has no stated national strategy aimed at the goal of greater GDP, there is no lack of individual suggestions about ways to improve the U.S. economic situation vis-à-vis the more rapidly developing nations. This often translates into asking for improved K–12 education, especially in science and technology. While improved education can only do good, education improvement is hard to come by and it is hard to imagine an improvement in education so profound that it turns out Americans who are so productive that they are worth hiring in place of the four or five Asians who can be hired for the same wage.

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[3] This is discussed in much greater detail in Reference 8 Chapter 1, especially pages 22 and 23 and in Reference 9 Chapter 7. See also Reference 7.

[4] From Reference 7.

[5] Reference 8, page 23.states that almost that 90 percent of shares are held by the top 20 percent of stock owners and has further data.

Another emphasis is the quest for innovation, usually innovation that is closely linked to R&D. More R&D can only help. But the role of science and technology in globalization needs to be understood. R&D does not contribute to a nation's wealth directly by employing large numbers of people in high value-added or high-wage jobs. It contributes by supporting a small number of people whose work is intended to give a competitive edge to the end product, whether that is goods or services. It is these end products, whether they are cars or computers or medical services that make up the bulk of a corporation's revenues and support the wages of its employees.

If in the process of globalization the production (or delivery in the case of services) of the good moves overseas, so do the wages. Even if R&D remains behind, the vast bulk of value creation has moved to another country, and it is there that it supports the wages of employees.

It is also hard to envision a significant industrial advantage vis-à-vis other countries derived from more university research, when a large fraction of graduate students in science are from Asian countries and who return home after obtaining their advanced degrees. Understand, too, that the great global companies Intel and Microsoft have research centers in leading universities and are well positioned to spread the latest research to their labs and development sites in other countries around the world.

Proposals of this sort about education and R&D can be helpful. But they can also be harmful if they create the mistaken belief that these measures alone can deal with the problem.

Another class of suggestions points to the U.S. infrastructure, correctly observing the crumbling bridges, crowded airports, and the inadequate broadband, which restricts the bit traffic of the future. Again, addressing these domestic needs is worth doing as it does add to U.S. productivity across the board.

The main thrust of this testimony, however, points to the divergence of company goals, focused almost exclusively on profit, and the broader goals of greater GDP and less inequality in the United States. Therefore, we need to turn our attention not only to the familiar suggestions I have just listed, but also to the issue of better aligning corporate and national goals.

Aligning Country and Company

Some Asian countries, for example Singapore and China, have national strategies aimed at the rapid increase of their GDP. As past of that strategy they align corporate goals with their national goals. They have made it profitable for foreign (often U.S.) corporations to create high value-added jobs in their countries. They do this by offering tax and other incentives that make it *profitable* for corporations to locate high value-added jobs in their countries.

We need to consider a U.S. national economic strategy that includes incentives for companies to have high value-added jobs in the United States. If we want high value-added jobs, let us reward our companies for producing such jobs—whether they do that through R&D and advanced technology, or by just plain American ingenuity applied in any setting whatsoever.

The Asian countries have done this usually by individual deals with individual companies. We have neither the tradition nor the knowledge nor the inclination in the U.S. Government to do that. An approach that is better suited to what the United States can do, would be to use the corporate income tax. We have already used the corporate income tax to spur R&D, so why not apply it to directly reward what we are aiming at—high value-added jobs.

For example, the corporate tax rate could be scaled by the value added per full-time employee, by the workers of corporations operating in the United States. A company with high value-add per U.S. employee would get a low rate, a company with low value-add per U.S. employee would get a high rate. This tax could be made revenue neutral by having a high tax rate for unproductive companies and a low (or even negative) tax rate for productive companies. Depending on the rates, it could be as strong or as weak an incentive as desired. This is quite doable, as value-add is measurable. It is measured today in Europe as the basis for the value-added tax.

Critics may say that our national economic strategy is, in fact, to leave markets alone and take whatever free markets produce. They may also suggest that this is the best possible economic strategy. But "free market" is not a single, simple concept. Do we mean free markets with or without anti-trust laws, with or without child-labor laws or with or without the ability for labor to organize? Do we mean free markets that do or don't have access to government sponsored research, etc., etc.? The presence or absence or degree of these restrictions or abilities will produce

very different results, all coming from "free markets"; as will different tax policies or special loans for special industries, and so on and so on.

On the subject of government incentives, a present day General Electric CEO Jeffrey Immelt recently stated:[6]

> If the U.S. Government "wants to fix the trade deficit, it's got to be pushed," he said. "GE wants to be an exporter. We want to be a good citizen. Do we want to make a lot of money? Sure we do. But I think at the end of the day we've got to have a tax system or a set of incentives that promote what the government wants to do."

On Inequality

In this part of my testimony I have discussed mainly total GDP. But we have seen that who benefits from GDP is important too and that globalization affects the distribution GDP of wealth as well as the total GDP.

So far I have discussed mainly increasing GDP. But there is also the question of extreme inequality, the concentration of wealth and power, and the influence over government that goes with it.

To reduce the natural forces working toward extreme inequality we should obviously consider what can be done through taxes, individual or corporate, but also consider charters for corporations that require consideration of other factors than profit maximization. Today in the United States, a Delaware-chartered corporation gives nothing in return for its charter. It is interesting that Theodore Roosevelt saw the role of corporations quite differently from the current Delaware perspective. Roosevelt's agenda was to control and regulate corporations in the public interest. "Great corporations exist only because they are created and safeguarded by our institutions," he stated in his 1901 State of the Union Message. "And it is therefore our right and our duty to see that they work in harmony with these institutions."

We have an interesting mild precedent for broadening the goals of corporations in the British Corporations Law of 2006. This law is explicit in allowing directors to consider employees, the community and many other factors in their decisions. Many U.S. states have in recent years passed similar statutes, but they have had little impact so far on the actions of corporations.

Controlling Our Own Destiny

To obtain the benefits of trade in the narrow sense we need free trade. This means, in particular, that we need to address the major distortions in the market caused by the systematic mispricing of Asian currencies and other mercantilist practices. If we do not have a free market in currencies we cannot claim that the benefits of free trade are being achieved.

If the imbalance of trade continues there is nothing to stop the current trend of selling off pieces of the United States to Sovereign Wealth Funds to balance the import of underpriced foreign goods. There would also be nothing to prevent U.S. companies from leaving the country, and, working from abroad, continuing to send in goods and services thus exacerbating the imbalance and weakening the productive capabilities of the country. On the other hand, if trade is balanced, the value of goods imported is matched to the value of goods exported from the country; and those goods and services are provided by corporations that comply with the U.S. standard of what a corporation should be. Balanced trade therefore is necessary if we are to control our own economic destiny.

Again, there is a litany of approaches to balancing trade ranging from jawboning to tariffs. One simple approach advanced and advocated by Warren Buffet, however, could really make a difference. It is well described in his 2003 article in *Fortune*.[7] This approach, in contrast to import quotas or tariffs aimed at imports from particular countries, creates a free market in import certificates. It would balance trade and would give us control over own economic destiny. Since the import certificate approach is a major departure from the past it should be introduced gradually. But we should take this approach seriously. In fact, a bill based on the Buffet approach has been introduced into the Senate by Senator Dorgan and Senator Feinstein.

Conclusion

We live in a world of rapid technological change. That change has made possible a degree of globalism in economic development that was previously not possible. In so doing it has strongly accelerated the emerging gap between the goals of global

[6] See Interview in Reference 10.
[7] Reference 11.

corporations and the aspirations of the people of individual countries. This is true not only in the United States but also in less developed countries. Even when globalization increases a country's wealth, which it does not always do, most of the gains are going to a thin upper crust, and the bulk of the people do not participate.

We need to change this and better align the goals of corporations and the aspirations of the people of our country. This is not an idle dream, the growth we had in America in the decades after WWII and before 1970 was both rapid and well distributed. Americans of almost every stripe benefited.

To do this today we must realign the interests of global corporations with those of the country. We have given a few examples of changes that could push in that direction. However, much more thought is needed in that direction. If we look we will find more and better ways to do this.

In addition, in a globalizing world where nations pursue their own interests with mercantilist policies, we must balance trade if we are to control our own destiny. Fortunately, there is at least one way to do that, the Buffet proposal.

There are many things we can work on to make the United States a stronger nation. Let us clear our vision and start now.

References

1. Hicks, J.R. 1953. An Inaugural Lecture. *Oxford Economic Papers* 5: 117–35.
2. Dornbush, Rudiger W., Stanley Fisher, and Paul A. Samuelson 1977 Comparative advantage, trade and payments in a Ricardo model with a continuum of goods, *American Economic Review* 67, pp. 823–829.
3. Krugman, Paul R. 1985. A "Technology Gap" Model of International Trade in K. Jungenfelt and D. Hague eds. *"Structural Adjustment in Developed Open Economies,"* New York, St. Martin's Press, pp. 39–45.
4. George E. Johnson, Frank P. Stafford "International Competition and Real Wages, *American Economic Review,* Vol. 83, No. 2, Papers and Proceedings of the Hundred and Fifth Annual Meeting of the American Economic Association (May, 1993), pp. 127–130.
5. Samuelson, Paul A, 2004, Where Ricardo and Mill Rebut and Confirm Arguments of Mainstream Economists Supporting Globalization, *Journal of Economic Perspectives* Volume 18, Number 3, pp. 135–146.
6. Ralph E. Gomory and William J. Baumol, 2001, *Global Trade and Conflicting National Interests,* MIT Press.
7. Barron's On Line Monday, August 13, 2007 "A Plea for Corporate Conscience" by Leo Hindery Jr.
8. Robert Kuttner, 2007, *"The Squandering of America,"* Alfred A. Knopf Publisher.
9. Paul Krugman, 2007, *"The Conscience of a Liberal,"* W.W. Norton & Co. Publisher.
10. Jeffrey Immelt, Interview in *Manufacturing and Technology News,* November 30, 2007, Volume 14, No. 21.
11. Warren Buffet, *Fortune Magazine,* October 2003, "America's Growing Trade Deficit Is Selling the Nation Out From Under Us. Here's a Way to Fix the Problem-And We Need to Do It Now."

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GLOBAL MANAGEMENT INC.

October 2003

Warren Buffet in Fortune Magazine

The following three articles were written by Warren E. Buffet and published in Fortune Magazine's October 26th, 2003 issue.

America's Growing Trade Deficit Is Selling the Nation Out From Under Us. Here's a Way to Fix the Problem—And We Need to Do It Now.

I'm about to deliver a warning regarding the U.S. trade deficit and also suggest a remedy for the problem. But first I need to mention two reasons you might want to be skeptical about what I say. To begin, my forecasting record with respect to macroeconomics is far from inspiring. For example, over the past two decades I was excessively fearful of inflation. More to the point at hand, I started way back in 1987 to publicly worry about our mounting trade deficits—and, as you know, we've not only survived but also thrived. So on the trade front, score at least one "wolf" for me. Nevertheless, I am crying wolf again and this time backing it with Berkshire Hathaway's money. Through the spring of 2002, I had lived nearly 72 years without purchasing a foreign currency. Since then Berkshire has made significant investments in—and today holds—several currencies. I won't give you particulars; in fact, it is largely irrelevant which currencies they are. What does matter is the underlying point: To hold other currencies is to believe that the dollar will decline.

Both as an American and as an investor, I actually hope these commitments prove to be a mistake. Any profits Berkshire might make from currency trading would pale against the losses the company and our shareholders, in other aspects of their lives, would incur from a plunging dollar.

But as head of Berkshire Hathaway, I am in charge of investing its money in ways that make sense. And my reason for finally putting my money where my mouth has been so long is that our trade deficit has greatly worsened, to the point that our country's "net worth," so to speak, is now being transferred abroad at an alarming rate.

A perpetuation of this transfer will lead to major trouble. To understand why, take a wildly fanciful trip with me to two isolated, side-by-side islands of equal size, Squanderville and Thriftville. Land is the only capital asset on these islands, and their communities are primitive, needing only food and producing only food. Working eight hours a day, in fact, each inhabitant can produce enough food to sustain himself or herself. And for a long time that's how things go along. On each island everybody works the prescribed eight hours a day, which means that each society is self-sufficient.

Eventually, though, the industrious citizens of Thriftville decide to do some serious saving and investing, and they start to work 16 hours a day. In this mode they continue to live off the food they produce in eight hours of work but begin exporting an equal amount to their one and only trading outlet, Squanderville.

The citizens of Squanderville are ecstatic about this turn of events, since they can now live their lives free from toil but eat as well as ever. Oh, yes, there's a quid pro quo—but to the Squanders, it seems harmless: All that the Thrifts want in exchange for their food is Squanderbonds (which are denominated, naturally, in Squanderbucks).

Over time Thriftville accumulates an enormous amount of these bonds, which at their core represent claim checks on the future output of Squanderville. A few pundits in Squanderville smell trouble coming. They foresee that for the Squanders both to eat and to pay off—or simply service—the debt they're piling up will eventually require them to work more than eight hours a day. But the residents of Squanderville are in no mood to listen to such doomsaying.

Meanwhile, the citizens of Thriftville begin to get nervous. Just how good, they ask, are the IOUs of a shiftless island? So the Thrifts change strategy: Though they continue to hold some bonds, they sell most of them to Squanderville residents for Squanderbucks and use the proceeds to buy Squanderville land. And eventually the Thrifts own all of Squanderville.

At that point, the Squanders are forced to deal with an ugly equation: They must now not only return to working eight hours a day in order to eat—they have nothing left to trade—but must also work additional hours to service their debt and pay Thriftville rent on the land so imprudently sold. In effect, Squanderville has been colonized by purchase rather than conquest.

It can be argued, of course, that the present value of the future production that Squanderville must forever ship to Thriftville only equates to the production Thriftville initially gave up and that therefore both have received a fair deal. But since one generation of Squanders gets the free ride and future generations pay in perpetuity for it, there are—in economist talk—some pretty dramatic "intergenerational inequities."

Let's think of it in terms of a family: Imagine that I, Warren Buffett, can get the suppliers of all that I consume in my lifetime to take Buffett family IOUs that are payable, in goods and services and with interest added, by my descendants. This scenario may be viewed as effecting an even trade between the Buffett family unit and its creditors. But the generations of Buffetts following me are not likely to applaud the deal (and, heaven forbid, may even attempt to welsh on it).

Think again about those islands: Sooner or later the Squanderville government, facing ever greater payments to service debt, would decide to embrace highly inflationary policies—that is, issue more Squanderbucks to dilute the value of each. After all, the government would reason, those irritating Squanderbonds are simply claims on specific numbers of Squanderbucks, not on bucks of specific value. In short, making Squanderbucks less valuable would ease the island's fiscal pain.
That prospect is why I, were I a resident of Thriftville, would opt for direct ownership of Squanderville land rather than bonds of the island's government. Most governments find it much harder morally to seize foreign-owned property than they do to dilute the purchasing power of claim checks foreigners hold. Theft by stealth is preferred to theft by force.

So what does all this island hopping have to do with the U.S.? Simply put, after World War II and up until the early 1970s we operated in the industrious Thriftville style, regularly selling more abroad than we purchased. We consistently invested our surplus abroad, with the result that our net investment—that is, our holdings of foreign assets less foreign holdings of U.S. assets—increased (under methodology, since revised, that the government was then using) from $37 billion in 1950 to $68 billion in 1970. In those days, to sum up, our country's "net worth," viewed in totality, consisted of all the wealth within our borders plus a modest portion of the wealth in the rest of the world.

Additionally, because the U.S. was in a net ownership position with respect to the rest of the world, we realized net investment income that, piled on top of our trade surplus, became a second source of investable funds. Our fiscal situation was thus similar to that of an individual who was both saving some of his salary and reinvesting the dividends from his existing nest egg.

In the late 1970s the trade situation reversed, producing deficits that initially ran about 1% of GDP. That was hardly serious, particularly because net investment income remained positive. Indeed, with the power of compound interest working for us, our net ownership balance hit its high in 1980 at $360 billion.

Since then, however, it's been all downhill, with the pace of decline rapidly accelerating in the past five years. Our annual trade deficit now exceeds 4% of GDP. Equally ominous, the rest of the world owns a staggering $2.5 trillion more of the U.S. than we own of other countries. Some of this $2.5 trillion is invested in claim checks—U.S. bonds, both governmental and private—and some in such assets as property and equity securities.

In effect, our country has been behaving like an extraordinarily rich family that possesses an immense farm. In order to consume 4% more than we produce—that's the trade deficit—we have, day by day, been both selling pieces of the farm and increasing the mortgage on what we still own.

To put the $2.5 trillion of net foreign ownership in perspective, contrast it with the $12 trillion value of publicly owned U.S. stocks or the equal amount of U.S. residential real estate or what I would estimate as a grand total of $50 trillion in national wealth. Those comparisons show that what's already been transferred abroad is meaningful—in the area, for example, of 5% of our national wealth.

More important, however, is that foreign ownership of our assets will grow at about $500 billion per year at the present trade-deficit level, which means that the deficit will be adding about one percentage point annually to foreigners' net ownership of our national wealth. As that ownership grows, so will the annual net investment income flowing out of this country. That will leave us paying ever-increasing dividends and interest to the world rather than being a net receiver of them, as in the past. We have entered the world of negative compounding—goodbye pleasure, hello pain.

We were taught in Economics 101 that countries could not for long sustain large, ever-growing trade deficits. At a point, so it was claimed, the spree of the consumption-happy nation would be braked by currency-rate adjustments and by the unwillingness of creditor countries to accept an endless flow of IOU's from the big spenders. And that's the way it has indeed worked for the rest of the world, as we can see by the abrupt shutoffs of credit that many profligate nations have suffered in recent decades.

The U.S., however, enjoys special status. In effect, we can behave today as we wish because our past financial behavior was so exemplary—and because we are so rich. Neither our capacity nor our intention to pay is questioned, and we continue to have a mountain of desirable assets to trade for consumables. In other words, our national credit card allows us to charge truly breathtaking amounts. But that card's credit line is not limitless.

The time to halt this trading of assets for consumables is now, and I have a plan to suggest for getting it done. My remedy may sound gimmicky, and in truth it is a tariff called by another name. But this is a tariff that retains most free-market virtues, neither protecting specific industries nor punishing specific countries nor encouraging trade wars. This plan would increase our exports and might well lead to increased overall world trade. And it would balance our books without there being a significant decline in the value of the dollar, which I believe is otherwise almost certain to occur.

We would achieve this balance by issuing what I will call Import Certificates (ICs) to all U.S. exporters in an amount equal to the dollar value of their exports. Each exporter would, in turn, sell the ICs to parties—either exporters abroad or importers here—wanting to get goods into the U.S. To import $1 million of goods, for example, an importer would need ICs that were the byproduct of $1 million of exports. The inevitable result: trade balance.

Because our exports total about $80 billion a month, ICs would be issued in huge, equivalent quantities—that is, 80 billion certificates a month—and would surely trade in an exceptionally liquid market. Competition would then determine who among those parties wanting to sell to us would buy the certificates and how much they would pay. (I visualize that the certificates would be issued with a short life, possibly of six months, so that speculators would be discouraged from accumulating them.)

For illustrative purposes, let's postulate that each IC would sell for 10 cents—that is, 10 cents per dollar of exports behind them. Other things being equal, this amount would mean a U.S. producer could realize 10% more by selling his goods in the export market than by selling them domestically, with the extra 10% coming from his sales of ICs.

In my opinion, many exporters would view this as a reduction in cost, one that would let them cut the prices of their products in international markets. Commodity-type products would particularly encourage this kind of behavior. If aluminum, for example, was selling for 66 cents per pound domestically and ICs were worth 10%, domestic aluminum producers could sell for about 60 cents per pound (plus transportation costs) in foreign markets and still earn normal margins. In this scenario, the output of the U.S. would become significantly more competitive and exports would expand. Along the way, the number of jobs would grow.

Foreigners selling to us, of course, would face tougher economics. But that's a problem they're up against no matter what trade "solution" is adopted—and make no mistake, a solution must come. (As Herb Stein said, "If something cannot go on forever, it will stop.") In one way the IC approach would give countries selling to us great flexibility, since the plan does not penalize any specific industry or product. In the end, the free market would determine what would be sold in the U.S. and who would sell it. The ICs would determine only the aggregate dollar volume of what was sold.

To see what would happen to imports, let's look at a car now entering the U.S. at a cost to the importer of $20,000. Under the new plan and the assumption that ICs sell for 10%, the importer's cost would rise to $22,000. If demand for the car was exceptionally strong, the importer might manage to pass all of this on to the American consumer. In the usual case, however, competitive forces would take hold, requiring the foreign manufacturer to absorb some, if not all, of the $2,000 IC cost.

There is no free lunch in the IC plan: It would have certain serious negative consequences for U.S. citizens. Prices of most imported products would increase, and so would the prices of certain competitive products manufactured domestically. The cost of the ICs, either in whole or in part, would therefore typically act as a tax on consumers.

That is a serious drawback. But there would be drawbacks also to the dollar continuing to lose value or to our increasing tariffs on specific products or instituting quotas on them—courses of action that in my opinion offer a smaller chance of success. Above all, the pain of higher prices on goods imported today dims beside the pain we will eventually suffer if we drift along and trade away ever larger portions of our country's net worth.

I believe that ICs would produce, rather promptly, a U.S. trade equilibrium well above present export levels but below present import levels. The certificates would moderately aid all our industries in world competition, even as the free market determined which of them ultimately met the test of "comparative advantage."

This plan would not be copied by nations that are net exporters, because their ICs would be valueless. Would major exporting countries retaliate in other ways? Would this start another Smoot-Hawley tariff war? Hardly. At the time of Smoot-Hawley we ran an unreasonable trade surplus that we wished to maintain. We now run a damaging deficit that the whole world knows we must correct.

For decades the world has struggled with a shifting maze of punitive tariffs, export subsidies, quotas, dollar-linked currencies, and the like. Many of these import-inhibiting and export-encouraging devices have long been employed by major exporting countries trying to amass ever larger surpluses—yet significant trade wars have not erupted. Surely one will not be precipitated by a proposal that simply aims at balancing the books of the world's largest trade debtor. Major exporting countries have behaved quite rationally in the past and they will continue to do so—though, as always, it may be in their interest to attempt to convince us that they will behave otherwise.

The likely outcome of an IC plan is that the exporting nations—after some initial posturing—will turn their ingenuity to encouraging imports from us. Take the position of China, which today sells us about $140 billion of goods and services annually while purchasing only $25 billion. Were ICs to exist, one course for China would be simply to fill the gap by buying 115 billion certificates annually. But it could alternatively reduce its need for ICs by cutting its exports to the U.S. or by increasing its purchases from us. This last choice would probably be the most palatable for China, and we should wish it to be so.

If our exports were to increase and the supply of ICs were therefore to be enlarged, their market price would be driven down. Indeed, if our exports expanded sufficiently, ICs would be rendered valueless and the entire plan made moot. Presented with the power to make this happen, important exporting countries might quickly eliminate the mechanisms they now use to inhibit exports from us.

Were we to install an IC plan, we might opt for some transition years in which we deliberately ran a relatively small deficit, a step that would enable the world to adjust as we gradually got where we need to be. Carrying this plan out, our government could either auction "bonus" ICs every month or simply give them, say, to less-developed countries needing to increase their exports. The latter course would deliver a form of foreign aid likely to be particularly effective and appreciated.

I will close by reminding you again that I cried wolf once before. In general, the batting average of doomsayers in the U.S. is terrible. Our country has consistently made fools of those who were skeptical about either our economic potential or our resiliency. Many pessimistic seers simply underestimated the dynamism that has allowed us to overcome problems that once seemed ominous. We still have a truly remarkable country and economy.

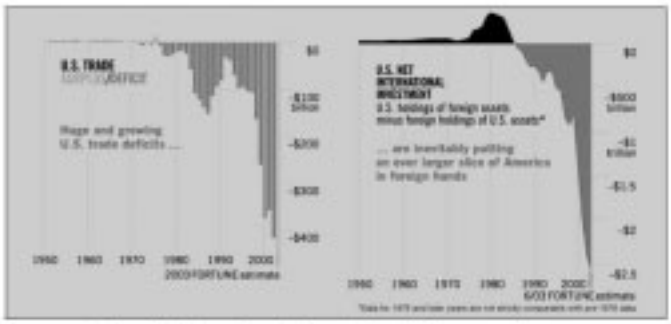
But I believe that in the trade deficit we also have a problem that is going to test all of our abilities to find a solution. A gently declining dollar will not provide the answer. True, it would reduce our trade deficit to a degree, but not by enough to halt the outflow of our country's net worth and the resulting growth in our investment-income deficit.

Perhaps there are other solutions that make more sense than mine. However, wishful thinking—and its usual companion, thumb sucking—is not among them. From what I now see, action to halt the rapid outflow of our national wealth is called for, and ICs seem the least painful and most certain way to get the job done. Just keep remembering that this is not a small problem: For example, at the rate at which the rest of the world is now making net investments in the U.S., it could annually buy and sock away nearly 4% of our publicly traded stocks.

In evaluating business options at Berkshire, my partner, Charles Munger, suggests that we pay close attention to his jocular wish: "All I want to know is where I'm going to die, so I'll never go there." Framers of our trade policy should heed this caution—and steer clear of Squanderville.

Truth and Consequences

Facing up to the effects of our trade imbalance



Fortune Graphics/Source: Bureau of Economic Analysis, U.S. Department of Commerce

Why Foreigners Can't Ditch Their Dollars

How often have you seen a comment like this in articles about the U.S. dollar? "Analysts say that what really worries them is that foreigners will start moving out of the dollar."

Next time you see something like that, dismiss it. The fact is that foreigners—as a whole—cannot ditch their dollars. Indeed, because our trade deficit is constantly putting new dollars into the hands of foreigners, they have to just as constantly increase their U.S. investments.

It's true, of course, that the rest of the world can choose which U.S. assets to hold. They can decide, for example, to sell U.S. bonds to buy U.S. stocks. Or they can make a move into real estate, as the Japanese did in the 1980s. Moreover, any of those moves, particularly if they are carried out by anxious sellers or buyers, can influence the price of the dollar.

But imagine that the Japanese both want to get out of their U.S. real estate and entirely *away* from dollar assets. They can't accomplish that by selling their real estate to Americans, because they will get paid in dollars. And if they sell their real estate to non-Americans—say, the French, for euros—the property will remain in the hands of foreigners. With either kind of sale, the dollar assets held by the rest of the world will not (except for any concurrent shift in the price of the dollar) have changed.

The bottom line is that other nations simply can't disinvest in the U.S. unless they, as a universe, buy more goods and services from us than we buy from them. That state of affairs would be called an American trade surplus, and we don't have one.

You can dream up some radical plots for changing the situation. For example, the rest of the world could send the U.S. massive foreign aid that would serve to offset our trade deficit. But under any realistic view of things, our huge trade deficit guarantees that the rest of the world must not only hold the American assets it owns but consistently add to them. And that's why, of course, our national net worth is gradually shifting away from our shores.

What Berkshire's Been Buying

I began way back in 1987 to publicly worry about our mounting trade deficits—and, as you know, we've not only survived but also thrived. So, on the trade front, score at least one "wolf" for me.

Nevertheless, I am crying wolf again and this time backing it with Berkshire Hathaway's money. Through the spring of 2002, I had lived nearly 72 years without purchasing a foreign currency. Since then Berkshire has invested in — and today holds — several currencies. I won't give you particulars; in fact, it is largely irrelevant which currencies these are. What does matter is the underlying point: To hold other currencies is to believe that the dollar will decline.

Both as an American and as an investor, I actually hope these commitments prove to be a mistake. Any profits Berkshire might make from currency trading would pale against the losses the company and our shareholders, in other aspects of their lives, would incur from a plunging dollar.

But I am in charge of investing Berkshire's money in ways that make sense. And my reason for finally putting my money where my mouth has so long been is that our trade deficit has greatly worsened, to the point that our country's "net worth," so to speak, is now being transferred abroad at an alarming rate.

October 26, 2003

BIOGRAPHY FOR RALPH E. GOMORY

Ralph E. Gomory is a Research Professor at the Stern School of Business of New York University (NYU) and is President Emeritus of the Alfred P. Sloan Foundation.

Dr. Gomory received his B.A. from Williams College in 1950, studied at Cambridge University and received his Ph.D. in mathematics from Princeton University in 1954. He served in the U.S. Navy from 1954 to 1957.

Dr. Gomory was Higgins Lecturer and Assistant Professor at Princeton University, 1957–59. During this period he invented the first integer programming algorithm. He joined the Research Division of IBM in 1959, was named IBM Fellow in 1964, and became Director of the Mathematical Sciences Department in 1965. In 1970 he became IBM Director of Research with line responsibility for IBM's Research Division. Under his leadership the Research division made major contributions to the computer industry, such as the invention of the Relational data base, and also won two Nobel Prizes. Dr. Gomory became an IBM Vice President in 1973 and Senior Vice President in 1985. In 1986 he became IBM Senior Vice President for Science and Technology. In 1989 he retired from IBM and became President of the Alfred P. Sloan Foundation. Under his leadership the foundation pioneered in on-line education and supported major scientific efforts such as the Sloan Sky Survey and the Census of Marine life. In December 2007 he became President Emeritus.

Dr. Gomory has served in many capacities in academic, industrial and governmental organizations. He is a member of the National Academy of Science, the National Academy of Engineering, and the American Philosophical Society. He was elected to the Councils of all three societies. He was a Trustee of Hampshire College from 1977–1986 and of Princeton University from 1985–1989. He served on the President's Council of Advisors on Science and Technology (PCAST) from 1984 to 1992, and again from 2001 to the present. He served for a number of terms on the National Academies' Committee on Science, Engineering and Public Policy (COSEPUP) and is presently a member of the National Academies Board on Science Technology and Economic Policy (STEP).

He has been awarded eight honorary degrees and many prizes including the Lanchester Prize in 1963, the John von Neumann Theory Prize in 1984, the IEEE Engineering Leadership Recognition Award in 1988, the National Medal of Science awarded by the President in 1988, the Arthur M. Bueche Award of the National Academy of Engineering in 1993, the Heinz Award for Technology, the Economy and Employment in 1998, the Madison Medal Award of Princeton University in 1999, the Sheffield Fellowship Award of the Yale University Faculty of Engineering in 2000, the International Federation of Operational Research Societies' Hall of Fame in 2005, and the Harold Larnder Prize of the Canadian Operational Research Society in 2006.

Dr. Gomory has been a director of a number of companies including the Washington Post Company and the Bank of New York (now Bank of New York–Mellon). He is currently a director of Lexmark International, Inc., and of two small start-up companies. He was named one of America's ten best directors by *Director's Alert* magazine in 2000.

In recent years, while continuing his mathematical research, he has written on the nature of technology and product development, industrial competitiveness, technological change, and on economic models of international trade. He is the author of a 2001 MIT Press book (with Professor William J. Baumol) on conflicts in international trade.

Chairman MILLER. Dr. Blair.

STATMENT OF DR. MARGARET M. BLAIR, PROFESSOR OF LAW, VANDERBILT UNIVERSITY SCHOOL OF LAW

Dr. BLAIR. Thank you. I knew to turn his on, I just didn't know to turn mine on. Thank you, Mr. Chairman, for the opportunity to speak to your Committee today. I am Dr. Margaret Mendenhall Blair. I am an economist, and I am also a Professor of Law at Vanderbilt University Law School; and I specialize in corporate law, corporate finance, and corporate governance.

What I want to speak to you today about is a question that has to do with the fiduciary obligations that corporate directors have,

by law, in this country. In particular, I want to address a claim that is often made in the press, and by members of what a Delaware Court judge has recently called the "corporate governance industry." This is the claim that corporate directors have a legal duty to maximize share value or maximize profits, if you want to think of it in those terms.

What I hope you will take from my testimony today is that this claim is, at best, a misleading overstatement; and at worst, this claim is false, but is often asserted as a weapon to try to persuade corporate managers and directors that they should take actions that benefit a particular group of shareholders of a given corporation, regardless of whether those actions may impose high costs on creditors, employees, the communities where the corporations operate, or other stakeholders, or sometimes even on the long-run ability of the corporation itself to compete effectively for market share, or to develop the next technology.

Let me begin with an indisputable legal fact: There is no statutory requirement in the U.S. that corporations must maximize profits or that directors are responsible for maximizing share value. The Model Business Corporation Act, Section 3.01 says simply, "Every corporation has the purpose of engaging in any lawful business unless a more limited purpose is set forth in the articles of incorporation." That is it. That is all it says about what the goal of corporations is.

Delaware Corporate Law just says that a corporation "may be . . . organized under this chapter to conduct or promote any lawful business or purposes." State statutes assign all powers to act for a corporation to its board of directors, but do not in any way prescribe how directors are to carry out this task.

Courts recognize that directors and managers must have very broad discretion to balance competing interests in a business enterprise because business decisions are often very complex. Courts further recognize that they should not be making business decisions for directors, or interfering in the actions that directors take in good faith. This legal doctrine is called the "business judgment rule." What this means is that directors are very rarely found in breach of their duties unless they engage in blatantly self-dealing behavior.

Now, I by no means intend to suggest today that in today's world corporate directors and managers are not under significant pressure to find ways to increase share value, sometimes even at the expense of the long-run performance of the company. But let me be clear that this pressure comes from the media, from shareholder advocates, from financial institutions in whose direct interest it is for the company to get its share price to go up, and from self-imposed pressure created by compensation packages that provide enormous potential rewards for directors and managers if stock price goes up. And by the way, those compensation packages also impose very little downside cost on the managers or directors if, in their attempt to goose the company to get share price to go up, it should not work out and the stock price declines. This means that managers and directors often have huge incentives to cause their companies to take very big risks in their effort to achieve higher share prices.

These pressures might be alleviated with certain policy actions that this body and/or other regulatory bodies could, in theory, take. In Britain, for example, the British Companies Act of 2006 explicitly codified what most lawmakers believed had already been the rule under case law in Britain, and it provides that directors have duties to multiple stakeholders. A change in the tax rules, for another example, might reduce the current tax preference given to compensation packages that are based on stock options and that makes those stock options so much more attractive than other forms of compensation.

In sum, decisions by managers and directors of U.S. corporations to choose investment strategies that may be profitable in the short run, but that sell our country short by moving value-creating activities offshore, are decisions that those managers and directors must take personal responsibility for. These decisions are not in any way mandated by law.

[The prepared statement of Dr. Blair follows:]

PREPARED STATEMENT OF MARGARET M. BLAIR

Thank you for the chance to speak to your Committee today.

I am Dr. Margaret Mendenhall Blair. I am an economist, and a Professor of Law at Vanderbilt University Law School where I specialize in corporate law, corporate finance, and corporate governance.

I want to speak to you today on a question about the fiduciary obligations that corporate directors have, by law, in this country. In particular, I want to address a claim often made in the financial press, and by members of what a Delaware Court judge has recently called the "corporate governance industry."[1] This is the claim that corporate directors have a legal duty to "maximize share value."[2]

What I hope you will take from my testimony today is that this claim is, at best, a misleading overstatement. At worst, this claim is simply false, but is often asserted as a weapon to try to persuade corporate managers and directors that they should take actions that benefit particular shareholders of a given corporation, regardless of whether those actions may impose high costs on creditors, employees, the communities where corporations have their operations, or other stakeholders, or sometimes even on the long run ability of the corporation itself to compete effectively for market share, or to develop the next technology.

Let me begin with an indisputable legal fact: There is no *statutory* requirement in the U.S. that corporations must maximize profits, or that directors are responsible for maximizing share value. The *Model Business Corporation Act*, §3.01 says

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[1] Leo E. Strine, Jr., Toward Common Sense and Common Ground? Reflections on the Shared Interests of Managers and Labor in a More Rational System of Corporate Governance, 33 *JOURNAL OF CORPORATION LAW* 1, 1 (2007) at 5, (describing the "Corporate Governance Industry" as "the strange admixture of public pension fund administrators, proxy advisory and corporate governance ratings organizations, corporate law scholars, and business journalists, who profit in monetary and psychic ways from corporate governance tumult." Strine is Vice-Chancellor of the Delaware Chancery Court. He further adds that "to say these folks profit from tumult is not a normative argument; it is a positive claim." Id.

[2] In a recent article in *FOREIGN AFFAIRS,* for example, Robert Reich asserted that we cannot rely on corporations themselves to change the rules of the game that are driving them to lay off employees, cut wages, and move production overseas. *"Corporate executives are not authorized by anyone—least of all by their investors—to balance profits against the public good,"* he claimed. Robert B. Reich, How Capitalism is Killing Democracy, *FOREIGN POLICY,* September/October, 2007. Typical of the share-value maximization rhetoric in the financial press is this quote from a financial analyst discussing Yahoo's recent decision to turn down an acquisition offer from Microsoft: "'While Yahoo!'s board has a fiduciary duty to maximize shareholder returns, running the risk of derailing a deal is dangerous to Yahoo! shareholders,' said Jefferies analyst Youssef Squali." Zachery Kouwe and Peter Lauria, Board Bucks Yang, *NEW YORK POST,* Feb. 15, 2008, available at *http://www.nypost.com/seven/02152008/business/board_bucks_yang_97797.htm.* Similar claims are repeatedly made in conversations about Yahoo's recent rejection of Microsoft's bid on blogs that follow those companies. See, e.g., Isn't Yahoo! Management Supposed To Work For Its Shareholders? posting by Timothy Lee to TechDirt Blog *http://www.techdirt.com/articles/20080304/192104440.shtml* (Mar. 5, 2008 10:24 a.m.). ("If I were a Yahoo! shareholder, I'd be pretty unhappy that things are being framed that way. Yahoo! management has a fiduciary responsibility to me, the shareholder, to maximize the value of my investment.")

simply, "Every corporation . . . has the purpose of engaging in any lawful business unless a more limited purpose is set forth in the articles of incorporation." Delaware Corporate Law just says that a corporation "may be . . . organized under this chapter to conduct or promote any lawful business or purposes."[3] State statutes assign all powers to act for a corporation to its board of directors, but do not in any way prescribe how directors are to carry out this task.[4]

Case law, which, in the U.S. is mostly made in the courts of the State of Delaware, also does not require share value maximization, except in one very narrow circumstance: When, in the course of buy-out negotiations, it becomes inevitable that a corporation will be sold, the Delaware Supreme Court has said that directors' duties then change "from defenders of the corporate bastion to auctioneers charged with getting the best price for stockholders at a sale of the company."[5] Note that, implicitly at least, this formulation of the law accepts the proposition that *directors may in all other circumstances act to preserve the long-run viability of the corporation itself,* even if other actions might be more immediately rewarding to shareholders.

To be sure, courts often note that directors have a duty to act in the best interest of "the corporation and its shareholders."[6] In theory, and sometimes in practice, these interests coincide with one another.[7] But not always.[8] For this reason, courts have always interpreted the mandate to act in the "best interest of the corporation and its shareholders" very broadly, to give directors wide discretion.[9] Moreover, in applying this mandate, courts implicitly or explicitly recognize that the corporation is a separate entity from its shareholders, and that directors' duties normally run to the corporation first. (My colleague Prof. Bruce Scott will say more about the importance of the corporation being a separate legal entity, and I have written about the historical importance of this feature of corporate law.[10] I would be happy to elaborate on this point if this committee wants to hear about this.)

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[3] DGCL §101(b).

[4] "All corporate powers shall be exercised by or under the authority of the board of directors of the corporation, and the business and affairs of the corporation shall be managed by or under the direction . . . of its board of directors." MBCA §8.01(b). "The business and affairs of every corporation organized under this chapter shall be managed by or under the direction of a board of directors. . . ." DGCL §141(a).

[5] *Revlon v. MacAndrews & Forbes Holdings, Inc.,* Del 506 A.2d 173 (1986).

[6] "In carrying out their managerial roles, directors are charged with an unyielding fiduciary duty to the corporation and its shareholders." *Smith v. Van Gorkom,* 488 A2d 858 (Del. 1085). Directors "are charged with an unyielding fiduciary duty to the corporation and its shareholders." *Guth v. Loft, Inc.,* 2 A.2d 225 (Del. Ch. 1938), *aff'd,* 5 A.2d 503 (Del. 1939).

[7] Law and economics scholars have claimed that, since shareholders are understood to be the "residual claimants" in corporations, maximizing value for shareholders should be equivalent to maximizing total wealth created by the corporation. See Margaret M. Blair, *OWNERSHIP AND CONTROL: RETHINKING CORPORATE GOVERNANCE FOR THE TWENTY-FIRST CENTURY,* Brookings, 1995, at 227, for a discussion of this line of economic argument.

[8] Finance theory makes it clear that shareholders can be made better off at the expense of other corporate participants by shifting risk onto them. Because shareholders may not be held liable for corporate debts (a protection granted to shareholders under the corporate law doctrine known as "limited liaiblity"), share value can be increased if the corporation engages in highly risky ventures, where shareholders have a chance for substantial gain if the venture works out, but most of the cost of failure falls on creditors.

[9] In a classic case establishing the relevant legal doctrine, shareholders of the Chicago National League Ball Club Inc., which owned the Chicago Cubs, sued directors on grounds of negligence and mismanagement because they would not install stadium lights in Wrigley Field so that the Cubs could play night games. See *Shlensky v. Wrigley,* Illinois Appellate Court, 1968, 237 N.E.2d 776. The court dismissed the complaint for failure to state a claim. See Margaret M. Blair and Lynn A Stout, A Team Production Theory of Corporate Law, 85 *Virginia Law Review* 247 (1999), noting that a series of court decisions in the mid- to late-20th century have "allowed directors to sacrifice shareholders' profits to stakeholders' interests when necessary for the best interest of the 'corporation.' " Courts, for example, have sanctioned directors' decisions to expend corporate resources for charitable purposes, to avoid risky undertakings that would increase profits at the expense of creditors, and to fend off corporate takeover bids that threatened to harm employees or the community. *Id.,* at notes 140–148 and surrounding text.

[10] Separate entity status for the corporation serves a crucially important economic function: it allows the corporation to hold assets in the name of the corporation over an indefinite time period, so that, unlike what would happen under default rules of partnership, the assets of a corporation will not be broken up and distributed when a shareholder dies or becomes insolvent or wants to re-deploy her wealth. The shareholder is instead free to sell her shares, but she cannot force dissolution of the corporation itself. The ability to keep assets invested in an enterprise for an indefinite time was critical to the development of the railroads, and other businesses that required long-lived specialized capital investment. For an extensive discussion of how these rules developed under corporate law in the 19th Century U.S., see Margaret M. Blair, Locking In Capital: What Corporate Law Achieved for Business Organizers in the Nineteenth Century, 51 *UCLA LAW REVIEW,* 2 (2003), 387.

Courts recognize that directors and managers must have very broad discretion to balance competing interests in a business enterprise because business decisions are often very complex. Courts further recognize that they should not be making business judgments for directors, or interfering with actions directors take "in good faith."[11] This legal doctrine is called the "business judgment rule."[12]

What this means is that directors are very rarely found in breach of their duties unless they engage in blatantly self-dealing behavior.

I by no means intend to suggest here that, in today's world, corporate directors and managers are not under significant pressure to find ways to increase share value, sometimes even at the expense of the long run performance of the company.[13] But let me be clear that this pressure comes from the media, from shareholder advocates and financial institutions in whose direct interest it is for the company to get its share price to go up, and from the *self-imposed* pressure created by compensation packages that provide enormous potential rewards for directors and managers if stock prices go up. And by the way, those compensation packages also impose very little downside cost on managers or directors if stock prices decline, which means that managers also often have huge incentives to cause their companies to take very big risks in their efforts to achieve higher share prices.

These pressures might be alleviated with certain policy actions that this body and/or other regulatory bodies could, in theory, take. In Britain, for example, the British Companies Act 2006 explicitly codified what lawmakers believed to be the rule under their case law, which provides that directors have duties to multiple stakeholders.[14] A change in the tax rules, for another example, might reduce the current

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[11] A classic statement of this position is the court's opinion in *Shlensky,* supra note 7 ("We are not satisfied that the motives assigned to Philip K. Wrigley, and through him to the other directors, are contrary to the best interests of the corporation and the stockholders. For example, it appears to us that the effect on the surrounding neighborhood might well be considered by a director who was considering the patrons who would or would not attend the games if the park were in a poor neighborhood. . . . By these thoughts we do not mean to say that we have decided that the decision of the directors was a correct one. That is beyond our jurisdiction and ability. We are merely saying that the decision is one properly before directors and the motives alleged in the amended complaint showed no fraud, illegality of conflict of interest . . . we feel that unless the conduct of the defendants at least borders on one of the elements, the courts should not interfere." See also *In re Caremark International, Inc. Derivative Litigation* 698 A.2d 959 (Del. 1996) ("Whether a judge or jury considering the matter after the fact, believes a decision substantively wrong, or degrees of wrong extending through 'stupid' to 'egregious' or 'irrational,' provides no ground for director liability, so long as the court determines that the process employed was either rational or employed in a *good faith* effort to advance corporate interests." (emphasis in original))

[12] See e.g., *Aronson v. Lewis,* 473 A.2d 805 (Del. 1984), at 812 ("The business judgment rule is an acknowledgement of the managerial prerogatives of Delaware directors under Section 141(a). It is a presumption that in making a business decision the directors of a corporation acted in an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company. Absent an abuse of discretion, that judgment will be respected by the courts.")

[13] Numerous shareholder proposals filed with the SEC, seeking to urge or compel directors to take certain actions, including selling off divisions, paying special dividends, or accepting a takeover offer from another company, justify their proposal on the grounds that the action would "maximize share value." See, e.g., Schedule 14A filed with the Securities and Exchange Commission by Wisconsin Central Shareholders Committee to Maximize Value, SEC File 0–19150, Oct. 23, 2000, announcing a proxy fight against directors of Wisconsin Central Transportation Corp. ("Edward A. Burkhardt, former Chairman, President and Chief Executive Officer of Wisconsin Central Transportation Corporation (NASDAQ:WCLS), today announced the formation of a committee to improve company performance and to maximize share value."). Available at *http://www.secinfo.com/dsvRs.55Wm.htm*

[14] (1) A director of a company must act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to-

(a) the likely consequences of any decision in the long-term,

(b) the interests of the company's employees,

(c) the need to foster the company's business relationships with suppliers, customers and others,

(d) the impact of the company's operations on the community and the environment,

(e) the desirability of the company maintaining a reputation for high standards of business conduct, and

(f) the need to act fairly as between members of the company.

Companies Act 2006, c. 46, § 172, available at *http://www.opsi.gov.uk/acts/acts2006/ukpga_20060046_en_13#pt10-ch2*

tax preference that makes compensation packages based on "stock options" so attractive relative to other approaches to executive compensation.[15]

In sum, decisions by managers and directors of U.S. corporations to choose investment strategies that may be profitable in the short-run, but that sell our country short by moving value-creating activities offshore, are decisions that those managers and directors must take personal responsibility for. These decisions are absolutely not mandated by law.

(I have some thoughts about how and why the notion that corporate managers must maximize share value came to be so widely accepted in the last three decades. But that is a longer story that I will not undertake to tell here unless the Committee wants to hear it. Instead I attach to this testimony a copy of Margaret M. Blair, Shareholder Value, Corporate Governance and Corporate Performance: A Post-Enron Reassessment of the Conventional Wisdom." *CORPORATE GOVERNANCE AND CAPITAL FLOWS IN A GLOBAL ECONOMY,* Peter K. Cornelius and Bruce Kogut, eds., Oxford University Press, January 2003 Available at SSRN: *http://ssrn.com/abstract=334240*)

[15] For a general discussion of how stock options receive favorable tax treatment, see Shevlin, Terry J. and Hanlon, Michelle, Accounting for the Tax Benefits of Employee Stock Options and Implications for Research (April 2001). University of Washington Working Paper. Available at SSRN: *http://ssrn.com/abstract=271310* or DOI: 10.2139/ssrn.271310

Chapter 3

Shareholder Value, Corporate Governance, and Corporate Performance

A Post-Enron Reassessment of the Conventional Wisdom

Margaret M. Blair

The first two years of the 21st century have been a sobering time for scholars and policymakers interested in corporate governance. As recently as two years ago, leading corporate scholars were prepared to declare that history was over in the ongoing debate about what corporate governance systems produce the best long-term outcomes for society.[1] Yale law professor Henry Hansmann and Harvard law professor Reinier Kraakman (2000) told us that the evidence was in, and that Anglo-Saxon–style market capitalism and shareholder primacy had proven itself to be the only system that could produce sustained economic growth.[2] These scholars based their empirical claims in part on the apparent success of the "shareholder-oriented model" of corporate governance that they claimed characterized the United States in the 1990s.[3]

Now, in the early fall of 2002, it has become clear that much of the stock market boom that had led to high yields on corporate equities and helped fuel strong economic growth in the United States during the 1990s was little more than a bubble, pumped up by the helium of accounting legerdemain. US stock prices have fallen back to where they were in 1997, wiping out most of the spectacular share-price gains that had led business people and policymakers to talk of a "New Economy;"[4] economic growth in the United States remains soft[5] and wave after wave of financial disclosure scandals are devastating investors and employees of US companies that had led the 1990s boom.

In light of these events, what can we say now about the role of corporate governance in the performance of corporations, and the economies of which they are part?

This chapter will review a number of the elements of what, by the year 2000, had become the conventional wisdom about corporate governance, and consider the evidence for the various assumptions and claims behind that conventional wisdom. Then

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it will suggest some alternative ways of interpreting that evidence, and propose the outlines of a new framework for understanding the problem of corporate governance, and for considering how various governance arrangements might help provide the institutional basis of sustainable corporate performance.

THE CONVENTIONAL WISDOM

Throughout the last two decades, economists, finance theorists, corporate legal scholars, and policymakers around the globe have been keenly interested in how corporations are governed, and how they should be governed. How should corporate executives balance pressures from financial markets for high stock returns against the need for long-term investments in innovation, customer and supplier relations, human resources, sustainable environmental performance, and good relations with their communities? How can investors have confidence that managers and directors will pursue the right balance? Are takeovers, for example, good or bad for corporate performance and economic growth? More generally, what institutional arrangements are needed to encourage the right outcome?

At least two broadly defined schools of thought have sought to answer these questions (Blair, 1995). These two views were first framed during the debate that took place in the United States in the 1980s and early 1990s about hostile takeovers and leveraged buyouts. One school argued that US corporations had become fat and lazy because corporate executives were building empires instead of investing only in those projects that added value for shareholders.[6] By this view, hostile takeovers and leveraged buyouts were the mechanisms by which financial markets were trying to impose some financial discipline on corporate executives: they removed executives of poorly performing companies (Palepu, 1986; Morck, Shleifer, and Vishny, 1988a, 1988b, 1989; Martin and McConnell, 1991); they forced their replacements to pay out large amounts of cash flow in the form of debt service (Jensen, 1986, 1988); and they tied the compensation of executives in the reorganized firm to stock price performance through compensation packages loaded with stock and stock options (Jensen, 1986, 1989; Jarrell, Brickley and Netter, 1988; Kaplan and Stein, 1993).

The countervailing view was that the ubiquitous threat of hostile takeovers in the 1980s and other financial pressures forced corporate executives to manage for short-term stock price performance, and prevented them from developing and implementing innovative strategies for long-term growth (Stein, 1989; Twentieth Century Fund, 1992; US GAO, 1993). By this view, financial market pressures for short-term stock price increases helped to explain why US corporations were falling behind foreign competitors in major industries, such as steel, automobiles, consumer electronics, and semiconductors (Dertouzos, Lester, and Solow, 1989). The remedy, according to propo-

nents of this view, was for large financial institutions to take long-term stakes in companies, and provide "patient capital" (Porter, 1992).

From very early in the debate, the financial market discipline view prevailed among most economists and financial and legal scholars. Finance theorists developed a compelling theoretical argument to support this view. They argued that the central problem of corporate governance was a "principal-agent" problem: how to get corporate managers to act as loyal and committed "agents" for the shareholders or "owners" of corporations (Jensen and Meckling, 1976; Fama and Jensen, 1983.). The so-called market for corporate control, through which financial investors could remove poorly performing managers, was viewed as a helpful, even necessary part of the arrangements that reigned in potentially wayward managements. (Jensen, 1986; Shleifer and Vishny, 1988) Advocates of this view produced voluminous evidence that the stock prices of companies rose when they became a target of a hostile takeover, and the fact of higher stock prices was taken as proof that the acquirer expected to manage the companies more efficiently than existing management.[7]

Meanwhile, across the globe, the collapse and breakup of the Soviet Union in the early 1990s seemed to prove that capitalism had won against socialism, lending credibility in general to arguments that markets always allocate resources more efficiently than bureaucracies, and in particular, that financial market discipline was a critical component of good corporate governance. Western advisers rushed to transition countries to tell them that, if they wanted to make their industrial enterprises competitive in world markets, they needed to sell control rights over those enterprises to financial investors, and put in place the institutional supports to create and sustain markets in which the claims and control rights could be traded (see, for example, Black and Kraakman, 1996).

As the 1990s unfolded, the United States pulled out of the recession of 1992 and into the longest peacetime expansion in the country's history. This expansion, led by the dramatic growth in investment in telecommunications, software, biotechnology, and the Internet, seemed to prove that US financial markets, far from being focused only on the short term, were quite capable of directing resources to long-term, innovative ventures, as well as adapting quickly in response to changes in the economic environment. Meanwhile, growth in the Japanese and European economies slowed to a crawl.[8]

All of these developments provided support and vindication for the financial market discipline advocates—so much so, that there seemed little left to debate. In the United States and Britain, all but a handful of scholars and policymakers and a few holdouts in the labor movement adopted the view that the appropriate goal of corporate governance is the maximization of shareholder value, and that the way to achieve this is to give increasing control over corporations to financial investors. By the late

1990s, this view was becoming more and more prominent in Europe and Japan, and in transition and developing countries as well.[9]

This conventional wisdom, that shareholder value should be the single, guiding principle of corporate governance, and that, to support this goal, enhanced investor control and oversight should be encouraged, has a number of assumptions and beliefs behind it, and implications that flow from it, that bear closer examination. The next section subjects these assumptions and implications to careful analysis.

A CLOSER LOOK AT THE SHAREHOLDER VALUE PRINCIPLE

The shareholder value principle of corporate governance incorporates or implies the following set of fundamental beliefs:

- Maximizing value for shareholders is the right social goal for corporations because it is equivalent to maximizing the overall wealth being created by a corporation.
- Financial markets do a good job of assessing the true value of financial securities such as common stock. Hence stock price performance is the best measure of value being created for shareholders.
- Maximizing share value also helps to discipline managers because it involves holding them accountable for a single metric that, in theory, is forward looking. Introducing other metrics would confuse things and make it easier for managers to use their positions to advance their own interests rather than the interests of shareholders.
- Managers and directors will do a better job of maximizing share value if they are given high-powered incentives in the form of compensation packages tied to stock price performance, such as stock options.
- For the full discipline of financial markets to work, outside investors must be free to take control of companies in hostile buyouts, and managers and directors should not be able to entrench themselves by putting up impenetrable barriers to such transactions.
- Except perhaps for a few laws that make it easier for managers to try to deter takeovers, US corporate law generally requires shareholder primacy. And, because it works so well in the United States, other countries should also adopt shareholder primacy regimes.

Let's consider each of these beliefs in turn.

Everyone is better off if share value is maximized

The belief that maximizing share value serves the broader social good because it is equivalent to maximizing the total value created by a corporation derives from a

theory of the firm adopted by finance theorists and legal scholars in the 1980s, in which a firm is understood to be a "nexus of contracts."[10] The theory highlights the nature of relationships underlying the firm—that is, among managers, employees, suppliers, customers, creditors, and shareholders. But proponents of the theory argue that the relationships of all of the firm's participants to the firm, except for those of shareholders, are governed by contracts that specify what each party is to do, and what each party should get in return. The shareholders' role is to be the "residual claimant": they are not entitled to a fixed amount, but are to get what is left over after all other participants have received what they are contractually entitled to receive (Easterbrook and Fischel, 1991). If the claims of all other participants are fully protected by contract, according to the logic of this theory, then maximizing what is left over for shareholders is equivalent to maximizing the size of the whole pie.[11]

Strictly speaking, the "nexus of contracts" model of the corporation implies that corporations have no "owners" in the traditional sense of that term, since no one can own the "nexus" through which they all engage with each other. But, shareholder value advocates argue, shareholders act as the residual claimants, and also have certain control rights. So, advocates believe, it is a useful, and not misleading, shorthand expression to call shareholders the "owners." The rhetoric of "ownership," however, subtly redefines corporations in terms of the presumed property rights of one class of participants in the firm, thereby adding a tone of moral superiority to the idea that corporations should be run in the sole interest of shareholders, a tone that is not implied by the nexus of contracts theory alone.

To anyone who has worked for a corporation or observed the ways that corporations can externalize some of their costs onto employees, customers, or the communities where they operate, the idea that maximizing share value is equivalent to maximizing the total social value created by the firm seems obviously wrong. But even from the point of view of the finance theorist who adopts a nexus of contracts perspective, finance theory itself demonstrates conclusively that this idea is wrong. Finance theory teaches us that the value of any claim on a firm is a function of the expected flow of payments to the holder of that claim, and the risk associated with the claim. Will the hoped-for payments actually be made? Will they be as much as the claimant hopes, or will the payments vary in size over time? Will they be made on time? Thus, if holders of one type of claim can shift risk onto holders of other types of claims, the value of the first type of claim will be increased at the expense of the value of the other claims.

Under corporate law, shareholders in US corporations have what is called "limited liability." Limited liability is a legal doctrine that means that the shareholders will not be held personally liable for debts (or tort claims) of the corporation. Thus shareholders always gain if the price of the stock goes up, but their potential losses are lim-

ited on the downside. In effect, creditors and other claimants are bearing some of the downside risk—they may be the ones who lose if the firm loses the gamble.

The argument extends to providers of nonfinancial inputs as well. Corporate employees, for example, make investments in specialized knowledge and networks of relationships needed in their jobs as well as in developing a reputation within the firm for working hard. Such investments are specific to the enterprise, and may be worthless to other employers. If the firm does well, the employee hopes to benefit from these specialized investments over the long term as the employee earns promotions and the firm continues to pay salaries, bonuses, and retirement benefits (Blair, 1995).

Hence all investors in corporations share to some degree or other in the risk of the enterprise, and it is often possible to make the holders of one kind of claim (such as stock) better off at the expense of holders of other claims on the firm (such as debt claims), simply by shifting risk. In retrospect, this is what many of the most egregious transactions at Enron were actually about: while they *appeared* to move assets and associated liabilities off of Enron's books, thus reducing the risk borne by Enron investors, in fact, the risk associated with those assets was being retained by Enron through side deals that were not fully reported (Bratton, 2002). So, unbeknownst to most of Enron's investors, Enron's common stock was becoming dramatically more risky during the last two or three years before the firm filed for bankruptcy protection. Substantial risk was also being shifted onto employees and creditors. The increase in risk of the stock, not coincidentally, made Enron stock *options* at least temporarily more valuable.[12] If Enron executives who were taking these gambles with corporate assets had, by chance, won the enormous bets they were placing, they would now be even more dramatically wealthy than they are. As it happens, they overplayed their hands, and when creditors discovered how risky their investments in Enron actually were, they cut off all further credit to Enron, forcing the company into bankruptcy proceedings. In the process, virtually all of the equity value in the company was lost, ultimately making the stock options worthless too.[13]

The fact that shareholders and option holders can often be made better off at the expense of creditors and employees and others with firm-specific investments at risk in the corporation means that, neither in theory nor in practice, is it true that maximizing the value of equity shares is the equivalent of maximizing the overall value created by the firm.[14]

Shareholder primacy advocates often argue, nonetheless, that, in the long run, corporations will have to be fair with their creditors, suppliers, employees, and other "stakeholders" in order to ensure that they will continue to participate in the enterprise (see, for example, Jensen, 2001). In this way, maximizing the "long-run" value of

the equity shares will necessarily require that the other stakeholders be compensated according to their expectations, so that in the "long run," it can still be true that maximizing share value is equivalent to maximizing total social value. To whatever extent this argument is correct, it can be reversed: in the long run, regardless of whose interests are considered primary, a corporation will have to provide an adequate return to shareholders and other financial investors or investors will not continue to supply capital to the firm. In theory, then, a corporate goal of maximizing long-run value for, say, employees, would also produce the maximum social value since all other stakeholders will have to be protected to ensure their long-run participation.[15] So this "in the long run" argument fails to make a case that shareholders' interest should be given precedence over other legitimate interests and goals of the corporation.

Stock prices reflect the true underlying value of the stock

The belief that share prices are a good measure of the actual value of a corporation to its shareholders is based on a financial theory known as the "efficient capital markets hypothesis." This theory says that at any point in time, if financial markets are deep and liquid enough, the price for which a share of stock trades is the best available estimate of the true underlying value of the security. Although finance theorists understand that this theory can never be proven,[16] they nonetheless continue to debate the question of how efficient capital markets are. On the one hand, there is evidence that market prices in US stock markets respond very quickly to good or bad news (Fama, 1970). On the other hand, there is also evidence that financial markets as a whole go through periods of boom and bust in which, in retrospect, it becomes clear that stock prices must have deviated substantially from their underlying fundamental value.[17] Some scholars have argued that, in fact, financial markets respond very quickly to information that is easy to interpret, but they respond to complex information only very slowly and imperfectly.[18] And a growing body of empirical work in "behavioral finance" suggests that financial markets overreact, and that they are susceptible to fads and bandwagon thinking that may allow stock prices to get badly out of line with reality before enough investors will act to sell an overpriced stock, or buy an underpriced one, to cause the stock price to move back into line (see, for example, Fama, 1998; Shiller, 2000; and Shleifer, 2000).

The fact that financial markets overreact and do not absorb complex information quickly and correctly means that there is room for corporate insiders to manipulate stock prices by releasing misleading information into the markets. The experience of the last two years certainly suggests that insiders can sometimes cause stock prices to deviate widely from the true underlying value. But even when insiders are not intentionally misleading the market, they will probably have knowledge that other market

investors do not have, and therefore have reason to know when a stock's market price is out of line with the underlying reality. That is why US securities law forbids trading on "inside information," although, the lessons of the last two years must surely include the reminder that insiders do sometimes trade on information the market does not yet have.

Managers must have a single metric against which to measure their performance

The argument is commonly advanced that directors and managers must be held accountable for a single metric such as shareholder value, because otherwise they cannot be held accountable at all.[13] In its own way, this argument is an admission that the other rationales for shareholder primacy are bankrupt, but that we should nonetheless use share value to measure the performance of corporate officers and directors because it is simple and easy to apply, while other metrics are complex, subject to manipulation by managers, and inevitably involve tradeoffs that require subjective rather than objective judgment. Here again, the events of the past few years should disabuse all of us of any notion that share price is not a manipulable metric. While it is true that share prices respond to new information, and perhaps even true that over any 5- to 10-year period share prices on deep and liquid markets will tend, on average, to reflect the true underlying value of a corporation (whatever that means), the long run can be quite long relative to the financial health of a given corporation, which can change dramatically in 5 to 10 years. Meanwhile, the damage done in the short-run, while the market is being fooled, can be substantial. The point is not that share price is irrelevant, but that it is overly simplistic—in fact, dangerously so, as I will argue below—to focus too much attention on share price to the exclusion of other measures of corporate and managerial performance.

The importance of high-powered incentives

The belief that managers and directors should be compensated in stock and stock options in order to create high-powered incentives for them to maximize share value follows naturally from the approach of using the economists' model of human behavior to analyze corporate governance questions. Economic analysis is based on a set of assumptions about the way people work in groups. In particular, part of the conventional wisdom has been that directors and managers of companies will always make decisions in ways that serve their own personal interests unless they are either tightly monitored and constrained (which is costly, and raises the question of who will monitor the monitors), or given very strong incentives to manage in the interests of shareholders (e.g., Shleifer and Vishny, 1997). This premise about the way the world works has led to a small industry of compensation consultants who have advised firms to pay corporate executives and directors in stock options, so that they would be highly motivated to get the company's stock price to go up. The problem has been that stock options, as discussed

above, create skewed incentives for executives—option holders win big if the stock goes up, but they are not penalized if the stock price goes down. Furthermore, the models used by the compensation consultants often provide that if the stock price goes down, then options should be repriced, or executives should be awarded a large number of additional options (with a lower strike price) so that they will again be well-motivated to get the stock price to go up from wherever it is at the time (Gillan, 2001).

The result has been a veritable orgy of stock option awards to CEOs and other senior managers of US companies. Just 20 years ago, salary, benefits, and performance bonuses typically accounted for 65 percent of CEO compensation, and stock option gains and grants no more than 35 percent (Blair, 1994). Total CEO compensation was also, on average, about 42 times the earnings of the average factory worker.[20] By 2001, total CEO compensation, of which stock option gains and new stock option grants accounted for more than 85 percent,[21] had ballooned to 400 times the earnings of the average worker.[22]

Although stock options do help tie CEO pay to the performance of the stock price, they create other incentives that can be quite perverse. As noted above, stock options are more valuable the more risky the underlying security, so that stock option compensation can encourage CEOs to pursue very risky strategies. This is especially true if the options are "out of the money" (meaning that the current stock price is below the strike price of the options) or just barely "in the money" (meaning that the current stock price is just barely above the strike price of the options). In such situations, the stock option holder stands to win big if a corporate gamble pays off, but can lose little or nothing if the gamble fails.

An additional danger arises from the fact that compensation packages that depend heavily on stock options can encourage corporate executives to play games to try to manipulate the stock price so that their options will be in the money when it is time for the executive to exercise his options. This can encourage executives to focus on stock price, rather than focusing on the underlying fundamentals of the business they are in. Al Dunlap, for example, was given USD 2.5 million three-year options, plus one million shares of restricted stock, when he was hired as CEO at Sunbeam in 1996 (plus an annual salary of USD 1 million) (Hill, 1999, p. 1101), and he handed out large stock option packages to more than 250 of the top Sunbeam executives and managers. In 1997 the company reported sharply increased sales and profits so that in February, 1998, Sunbeam's board gave Dunlap a raise in salary to USD 2 million, and USD 3.75 million more options.[23] But it turned out that those high sales and profits had been achieved by manipulating the accounting—taking an oversized restructuring charge in 1996, for example, and using the surplus to pad income in 1997 (Byrne, 1999). Dunlap was caught and fired, and thus lost the game he was playing.[24] But when faced with

potentially huge upside potential and little or no downside financial risk, the incentives to play such games are quite powerful, putting enormous pressure on corporate executives to meet or beat the numbers that Wall Street analysts are predicting.

Another result of stock option-based compensation has been the widespread practice of "earnings management." At its most benign level, earnings management is simply using the flexibility available in the accounting rules to smooth earnings or cash flow numbers. But once the practice is sanctioned, it can lead to egregious abuses and, as the Sunbeam experience indicates, and as we have seen in recent months at WorldCom and other companies, outright fraud.[35]

Stock option compensation can be incredibly seductive. In fact, the temptation it creates to focus solely on stock prices, regardless of how they are achieved, can be so powerful that it appears that during the last few years before Enron filed for bankruptcy, the entire board of directors, including CEO Kenneth Lay, had lost track of what actual business the company was in—what goods and services it was providing for sale to sell to consumers, for example—and came to believe the company was making huge amounts of money in some kind of "New Economy" commodities trading business, although no one seemed to be able to actually explain the business. In reality, it turns out, the trading activity amounted to little more than a massive con game to create the appearance of growing revenues and profits, to try to keep the stock price rising.

The dangers of accounting manipulation extend beyond the companies where executives are actually engaging in such practices. Because many corporations operate in highly competitive industries, manipulation at one company can help to set an unrealistically high performance hurdle at competing companies, which adds to the pressures on corporate executives at those companies to pursue risky strategies, or to also begin manipulating their numbers.[36]

Financial market discipline requires an unfettered market for corporate control

Most proponents of the share value principle also believe that financial market discipline in the form of an active market for corporate control is an important part of any corporate governance system (Manne, 1965; Jensen, 1988; 1993; Scharfstein, 1988; Easterbrook and Fischel, 1991). According to these theorists, an active takeover market should make shareholders better off because it makes it easier for control of corporations to be transferred to those who can manage them best. Early empirical evidence based on what happens to the stock price of firms that become targets seemed consistent with this theory (Jensen and Ruback, 1983). Some of the gains to target company shareholders in hostile takeovers in the 1980s were later explained by the subsequent sell-off of assets in the target firms to other firms in related lines of business (Bhagat, Shleifer, and Vishny, 1990), and some were apparently explained as the transfer of value

from workers through layoffs and reductions in wages and benefits (Shleifer and Summers, 1988; Neumark and Sharpe, 1996; and Pontiff, Shleifer, and Weisbach, 1990). But much of the gain remains unexplained, and as the 1980s takeover wave played itself out, many of the transactions that took place toward the end of the decade failed to produce improved performance (Long and Ravenscraft, 1993; Kaplan and Stein, 1993).

But regardless of the source of the gains, one of the implications of the shareholder value principle is the belief that if shareholders could get a higher price for their shares *now* by selling out to a "raider," they ought to be permitted to do so, and the existing board should not be allowed to get in the way. Arguments by existing managers that directors should be allowed to reject hostile takeovers when they believe that shareholders would be even better off later if the firm is not taken over contradict the efficient capital markets hypothesis, so they were never accepted by most finance-oriented scholars.

This faith in the importance of the market for corporate control has led to ongoing debates among corporate legal scholars in the United States about institutional arrangements and response tactics designed to deter takeovers. Shareholder value proponents have been convinced that such arrangements and tactics ought to be bad for shareholders, and by extension, bad for corporate performance and for the economy as a whole.

Two such takeover defenses have been the focus of considerable empirical research in an attempt to determine their impact on corporate performance and shareholder value: "poison pills," which are rights granted to existing shareholders that have the effect of imposing substantial costs on potential acquirers; and "staggered" boards, in which (typically) the term of each board member is three years, and only a third of the board is elected each year.

Early research suggested that poison pills reduce shareholder wealth (Ryngaert, 1988; Malatesta and Walkling, 1988). But subsequent research suggested that poison pills give managers leverage, helping them to negotiate a higher price in the event of a takeover offer, and later empirical studies could no longer find evidence of reduced shareholder value from poison pills (Comment and Schwert, 1995). In fact, Danielson and Karpoff 2002, find evidence that operating performance improves modestly in the five years after a company adopts a pill. Also, it is interesting to note that most young firms adopt poison pills at the time that they go public in an "initial public offering" (IPO) (Daines and Klausner, 1999). Theorists have argued that the original entrepreneurs in a firm can be expected to put governance arrangements in place that will make the firm as valuable as possible to outside investors when they go public, so the fact that most IPO firms have poison pills suggests either that pills do not reduce value to shareholders, or that the protection they provide to management is valuable enough to the original entrepreneurs for other reasons that they are willing to sacrifice some value in the shares they sell to the public.

Most public companies in the United States have staggered or "classified" boards (Bebchuk, Coates, and Subramanian, 2002). The benefits of a staggered board include continuity and stability of the board, as well as a greater independence from management (Koppes, Gamble, and Haag, 1999). But, some scholars argue, staggered boards provide a potent takeover defense—especially when combined with poison pills—because they require an acquirer to wait through at least two election cycles to replace enough members of the board to gain control. Bebchuk, Coates, and Subramanian (2002) provide evidence that the takeover defense provided by staggered boards reduced the returns earned by shareholders of target firms in the late 1990s.[27] Sanjai Bhagat and Richard Jeffris (2002) find conflicting evidence, however. Using a simultaneous equation model that takes into account the interactions among takeover activity, takeover defenses, managerial turnover, and corporate performance, they conclude that a wide variety of so-called "takeover defenses" (including poison pills and staggered boards) are not actually effective at deterring takeover activity in firms where performance has been poor. In other words, takeover activity and managerial turnover are linked to firm performance, regardless of the presence or absence of poison pills or staggered boards (Bhagat and Jeffris, 2002, p. 13)

US law requires shareholder primacy

Since the early 1990s, advisers from US-based multinational financial institutions have been preaching the message of shareholder primacy to transition economy countries looking to reform their economies, and even to other developed countries.[28] One of the reasons has been a belief that US law requires shareholder primacy, and that, since it has worked so well in the United States, other countries should adopt similar legal rules. One of the ironies in the whole international debate about corporate governance, however, is that US corporate law does not actually require shareholder primacy. Rather, US corporate law comes closer to requiring "director primacy" (Blair and Stout, 1999; Bainbridge, 2002).[29] State laws governing the incorporation of firms typically provide that "all corporate powers shall be exercised by or under the authority of, and the business and affairs of the corporation managed by or under the direction of, its board of directors" (Model Business Corporation Act §8.01(b)). Shareholders are allowed to vote each year on a slate of directors nominated, generally, by the existing directors, and they are allowed to vote on certain major transactions (such as a sale of the business or a liquidation). But other than that, shareholders in large, publicly-traded corporations have few formal powers.

Meanwhile, the law regards directors as fiduciaries for the corporation, not agents of shareholders (Clark, 1987). For this reason, courts give directors very wide discretion in the choices they make about a firm's strategy or transactions. Directors can only be held liable for breach of their fiduciary duties if they are grossly negligent in

approving corporate actions, or if they engage in transactions that benefit themselves at the expense of the corporation. (See detailed discussion in Blair and Stout, 1999.)

Nonetheless, although corporate law has not changed significantly in recent years to give shareholders more formal power, a few large institutional investors have taken an active role in voicing concerns about the performance of certain corporations, and about corporate governance in general.[30] Because these investors have the ability to sell their shares, as well as to voice their criticisms publicly, thereby putting downward pressure on stock prices, corporate directors and managers have learned to listen when institutional investors speak. Thus, in US companies in which institutional investors hold substantial blocks of shares, those institutional shareholders sometimes exercise considerable clout, making the system look on the surface more like a true shareholder primacy system.

Scholars have debated whether, in this way, the presence of a large institutional shareholder might help to reduce the "agency problem" in corporations, and whether activism by such shareholders might improve corporate performance (Black, 1992; Jacobs, 1991). Early evidence suggested that firm financial performance rises as the holdings of the largest shareholder rise, up to a relatively low point (such as 5 or 10 percent), and then falls as the holdings of the largest shareholder gets larger (Morck, Shleifer, and Vishny, 1988b; Wruck, 1989; and McConnell and Servaes, 1990). One explanation that has been offered for this phenomenon is that, as the holdings of the largest shareholder rise to levels in which he or she can begin to exercise control, that shareholder becomes better able to extract private benefits from his position, sometimes at the expense of the firm as a whole. In any case, empirical studies have been unable to find a consistent, robust, relationship between evidence of large shareholder activism and corporate performance (Black 1992; and Bhagat, Black, and Blair, 1999).

DOES CORPORATE GOVERNANCE, IN FACT, MATTER FOR CORPORATE PERFORMANCE?

As we have already discussed above, it turns out to be hard to find evidence that features of the governance of US corporations that corporate scholars originally thought were important, actually matter very much. The threat of hostile takeover in an active market for corporate control may help to discipline management, but the evidence on whether actual takeovers improve corporate performance is mixed. Institutional arrangements such as staggered boards and poison pills that were put in place to deter takeovers may have little or no actual deterrence effect, or measurable effect on performance,[31] and activism by large-block shareholders does not, so far, seem to produce consistent improvement in corporate performance.

What about board "independence"—the idea that directors should not have close personal, financial, or business relationships with CEOs or other members of the

management team that could influence their attitude toward management and perhaps deter them from disciplining management when needed? This idea has become so widely viewed as necessary for good corporate governance that during the summer of 2002, both the New York Stock Exchange and the Nasdaq proposed new rules that would require that firms registered on those exchanges have a majority of independent directors, as well as increase the role that independent directors must play on the boards (NYSE 2002; Nasdaq 2002). Yet, here again, the idea sounds sensible, but the evidence is sparse. Bhagat and Black (2002), among others, find "no convincing empirical evidence that the proportion of independent directors impacts future performance as measured by a variety of stock price and accounting measures."[32]

The bottom line is that researchers have been unable to find strong and consistent evidence that variations in corporate governance arrangements among US companies have much impact one way or the other. Some studies show small effects of some arrangements in some narrow circumstances, but often the results have not held up in other samples. And in any case, the effects tend to be small.

Yet, when corporations around the globe are compared with each other, there are dramatic differences in corporate performance from one country to another (Shleifer and Vishny, 1997). Such differences are apparently related to broad institutional arrangements such as whether the country has an active and efficient financial market, an independent accounting profession, court systems that are uncorrupted and capable of adjudicating complex contractual disputes, and effective securities regulation. Shleifer and Vishny (1997, p. 739), for example, suggest that the essential element for effective corporate governance is some mechanism of "legal protection for the interests of at least some of the investors, so that mechanisms of extensive outside financing can develop." Beyond that, they conclude that the evidence is not even compelling enough to decide whether or not the US system of corporate governance, with widely-traded shares, liquid markets, and reasonably effective securities regulation, is better than the systems in other developed countries in Europe or in Japan, where corporate shares tend to be much more closely held by dominant financial institutions that are actively involved in corporate governance. If it is impossible to decide between systems in developed countries, it is even less realistic to expect to find strong effects of, say, staggered boards, or independent auditing committees, within a given system.

In other words, once a country has in place the basic institutional arrangements to support the use of the corporate legal form (including sophisticated, but uncorrupted courts, reasonably honest trading of financial securities, an independent accounting profession, and effective security markets regulators), and flexibility to custom-design governance arrangements at the level of each firm, it may be that the details of

board structure and the degree of management independence versus shareholder involvement, really do not matter very much, at least in a way that we can measure in a broad cross-section of firms. The details of corporate governance are worked out in each company on a case by case basis, and sometimes the arrangements appear to work very well, and sometimes they fail and must be reworked. Economic reasoning, in fact, would predict that institutional arrangements would tend to vary across firms according to what works in each firm. But if each firm has chosen the best approach for that firm, with only random errors, we would not necessarily be able to observe performance differences that vary systematically with the details of governance structures.

Nonetheless, the broadly-defined institutional setting in which corporations act, and the norms and standards supported by those institutions, may matter significantly.[33]

A NEW FRAMEWORK FOR THINKING ABOUT CORPORATE GOVERNANCE

The first three parts of this chapter critiqued the shareholder value principle and argued that structural and institutional details of corporate governance may not have a substantial and consistent impact on corporate performance. So what does matter? Can we say anything of importance about the relationship between corporate governance and corporate performance, beyond the importance of basic legal and institutional infrastructure? I believe we can, and in this section I offer an alternative way to understand the goals and purposes of corporations that I believe can better support sustainable corporate performance. I begin by suggesting that the central problem to be addressed by forming a corporation is what my colleague Professor Lynn Stout and I have elsewhere called the "team production" problem (Blair and Stout, 1999).

A "team production problem" arises any time that a group of individuals agree to work together on a complex production task, in a situation in which it is difficult to agree in advance about what everyone is supposed to contribute, and what everyone can expect to get out of the joint effort.[34] The problem arises because team members will have to make investments in the joint enterprise—by contributing time, effort, money, and/or ideas—that may be sunk in the business and hence not recoverable except by carrying out the enterprise and sharing in the income it generates. Since most team members' investments are, in this sense, enterprise-specific, team members must make themselves vulnerable to each other as they undertake the business venture. Each team member is vulnerable not only because the venture itself is inherently risky, but because any one of the other team members could try to "hold-up" the team by threatening to pull her contributions back out unless she gets a larger share of the proceeds. For individuals who make especially important contributions, the potential threat of being held up by some other team member can be troubling enough that it can prevent individuals from working together as a team in the first place.

When a team is small, very often team members can develop trusting relationships and work out terms on which they will work together as they go, without elaborate corporate governance arrangements or rules. But a large enterprise that involves hundreds or thousands of participants requires some basic institutional arrangements or ground rules to facilitate cooperation among team member. For business enterprises in the developed world, the most common institutional arrangement is to be "incorporated." Incorporation provides a unique solution to the contracting problems in team production. Through the incorporation process, the law creates a separate legal entity that has many of the same rights and powers under the law as a flesh-and-blood person would have.[35] In particular, it can own property, enter into contracts, and be held liable for debts or tort claims. In the typical business corporation, shareholders receive stock in the corporation in exchange for their contribution of financial capital. Executives and employees receive some cash compensation, but they may also receive stock, or options, or promises of deferred compensation, as well as the expectation of future raises and promotions if the enterprise is successful. Suppliers, bondholders, and other creditors also get claims on the corporation, some of which are short-term claims that are rapidly paid off, and others that are more long-term.

But, importantly, while each participant has some kind of claim against the corporation, none of them "owns" the corporation; the corporation is an entity separate from all of its participants. Moreover, by the incorporation process, the corporation itself—not any of its individual participants—becomes the owner of all the assets contributed by the various participants for use in production, as well as of any output from the enterprise (at least until such output is distributed). The fact that the corporation owns the assets used in production means that, in forming the corporation, the team members all give up much of their ability to "hold up" the enterprise. Once they contribute their input, it becomes the property of the corporation and is no longer subject to the control of the contributor. Thus the corporate form of organization can be seen as a legal mechanism that facilitates cooperation among team members by making it easier for team members to credibly commit to each other that they will not hold up the team once production gets under way.

The team production approach to understanding corporations suggests a very different role for directors than the principal-agent approach favored by shareholder primacy advocates. In the principal-agent model, shareholders are seen as the "owners" of corporations,[36] who hire directors to run the corporation for them because they are too busy to do it for themselves. In the team production model, directors are the people who are given the legal responsibility to act for the corporation (since it, obviously, cannot act on its own). By forming a corporation and selecting directors, corporate participants agree to yield ultimate control rights over the corporate enterprise

to the board. The effect of this agreement is to tie their hands, so they cannot easily snatch control back and use it to hold up the other participants. Board members, then, are part of the institutional mechanism intended to facilitate trust among all the team members. An important role of directors in this model is to serve as the mediators for the team members, the final arbiters of any disputes that may arise among them over enterprise strategy, or over the division of enterprise output (Blair and Stout, 1999). As such, it is important to the long-term health and prosperity of the enterprise that team members view board members as fair and trustworthy.

Under team production analysis, several features of US corporate law that are inconsistent with shareholder primacy make sense. For example, shareholders may not dictate tactics or policy to directors,[37] or demand dividends.[38] And the law is extremely deferential to the decisions of directors.[39] If this were not true, if directors' decisions could easily be challenged in court, or if directors were subject to the direct command and control of any of the team members, those team members could not credibly commit to the other team members not to attempt a hold up. Hence, as long as directors do not use their positions to steal from the team (the corporation) or otherwise enrich themselves at the expense of the team, and as long as directors exercise a reasonable amount of care in carrying out their duties, courts will not second-guess them.

Team production theory also explains why so few corporate decisions must be put to a vote of shareholders.[40] It also offers an explanation for why directors owe fiduciary duties to the corporation itself, and not directly to shareholders.[41] And it explains why shareholders may not sue directors on their own behalf for violations of directors' fiduciary duties, but must undertake what is called a "derivative" suit.[42] In a derivative suit, the shareholder may seek court permission to act for the corporation as a whole in suing directors for violations of their fiduciary duties and in attempting to collect damages. But she must first convince the court that she, and not the directors, should be entitled to act for the corporation.[43] Moreover, if she wins the suit and directors are required to pay damages, the payments go not to the shareholder who sued but to the corporation (see Clark, 1986, p. 659).

The team production approach suggests that corporate performance must be measured in multiple dimensions, and that no single measure of corporate performance can tell the whole story of how well the corporation is doing. Share price is important, because, even though it is noisy and subject to manipulation, it should at least reflect what one subset of financial investors on any given day think is the value of their claim on the corporation. But it also matters whether the corporation is meeting the expectations of other participants, not to mention whether it is fairly and accurately presenting its financial position to investors. Are bills from suppliers being paid on time? Are the operations and assets acquired in the last merger being well integrated into the company's opera-

tions? Are assets, liabilities, and risks to all corporate participants being fairly valued and accurately reported to investors? Are appropriate wages and benefits being paid? Are new technologies being developed and new products being introduced? Are the company's brands being effectively promoted? Are managements' growth plans realistic? Is the company on track to deliver planned growth and profits, and if not, what is the cause of the delay? Are employees being trained and prepared for increased or changing responsibilities? Is there a suitable succession plan in place for the top management team?[44]

The allure of shareholder value is that it is so easy: easy to use to monitor executives, and easy to incorporate in a compensation system. But being simple to understand and easy to measure doesn't make it the right measure of performance, and certainly not the only measure of performance that counts. The ease and simplicity of the share price metric, in fact, is part of what makes it such a dangerous measure to rely upon. Focusing only on share price performance encourages managers, directors, analysts, and investors to be lazy, to take short cuts in developing corporate strategies and plans, and in evaluating how well the firm is doing.[45] Or worse, by sending the message that only financial gain matters, a monomaniacal focus on share value can inadvertently also send the message that personal integrity and trustworthy behavior do not matter. By contrast, the team production approach emphasizes the complexity of the problem of governing and managing a corporation, points to the demanding nature of the job of corporate executives and directors, and signals that directors and other team members are expected to cooperate with each other rather than try to extract gains at each others' expense.

Professor Stout and I have suggested elsewhere (Blair and Stout, 2001b) that one way to understand the job of corporate directors is that they are charged with making the trade-offs that are required to keep a productive team together, to make sure all of the essential members of the team play fairly with each other, share the necessary information with each other, and continue to contribute. In some cases, boards may also be called upon to help team members develop a new strategy or work out a different way to create value for the team.

One common criticism of the team production analysis of corporate governance is that, while it may explain why corporate law *permits* directors to make tradeoffs among competing interests instead of compelling them to act only in the interests of shareholders, it does not explain why directors *would bother* to work hard or make decisions for the benefit of the corporation and not just for their own personal benefit. In response, we have argued that the effectiveness of the system ultimately relies on corporate directors being trustworthy (Blair and Stout, 2001a). Although to scholars steeped in the logic of economic and legal reasoning, such a response may seem naive, substantial empirical evidence from cooperative game experiments suggests

that human beings are not always the coldly-rational, self-interested creatures that populate economic models. Instead, human beings seem to respond to social and cultural messages. If the social signals tell them that they are expected to trust the other players, and to be trustworthy themselves, and if the economic incentives to break trust or "defect" are not overwhelming, then the vast majority of people will choose to cooperate. Alternatively, if the social signals tell them that the game they are playing (or the social interaction they are involved in) is a competitive one in which they are expected to, say, win as much money as they can, even if doing so is harmful to the group, then that is what most people will do (Blair and Stout, 2001a).

Professor Stout and I further argue that, in practice, legal constraints rarely bind tightly enough to compel people to cooperate, and economic incentives often tilt against cooperation (Blair and Stout, 2001a). So when we observe cooperative, trustworthy behavior in the business world, chances are that this result is driven by strong social norms and expectations of trustworthy behavior in the particular context, rather than by law or economic incentives (Blair and Stout, 2001a and 2001b).

In other words, we believe that trust is the necessary glue that holds long-term business relationships of any kind together.[46] This is true even where an adequate legal and institutional infrastructure is in place, and it is probably especially true where such infrastructure is missing. And, it is clearly true for the relationships among all team members in a corporation, since even where law and institutions are strong, courts nearly always decline to adjudicate disputes between participants in a corporation over the allocation of assignments and rewards.[47] Professor Stout and I argue that it is the special role of corporate directors, in this context, to be people whom the team members feel they can trust, the wise elders, persons of honor and integrity, as well as of wisdom and good judgment. Just as the board as a whole is part of an institutional arrangement to facilitate trust, board members must be seen as the keepers and upholders of the team's trust. If the team members perceive directors to be these things, they will all be more willing to make themselves vulnerable to the other members of the team—to trust—by making necessary enterprise-specific investments.

CONCLUSION

This chapter argues that the notion that the primary, or in extreme versions, the only legitimate goals of corporate management and governance should be to maximize the value of the shareholders' interest in the company is based on a series of elegant and facile, but deeply flawed assumptions about the nature of the relationships among corporate participants, about how financial markets work, about how human beings work together in groups, and about what the law requires. Contrary to these assumptions, shareholders are neither the "owners" of corporations, nor the only

claimants with investments at risk; stock prices do not always accurately reflect the true underlying value of equity securities; managers will not necessarily do a better job of running corporations if they focus solely on share value, or if they are heavily incentivized with stock options, or if they are constantly vulnerable to being ousted in a hostile takeover; and corporate law does not require shareholder primacy.

Instead, this chapter suggests that, once the basic institutional framework is in place (rule of law, sophisticated and uncorrupted courts, an independent accounting profession, liquid financial markets and an adequate securities regulation system), the principal element needed to foster wealth-creating productive activity may be a powerful set of cultural norms emphasizing personal and group integrity, cooperative behavior among team members, and responsibility in the team's relationships to the larger communities in which it operates.[48] Organizing productive activities within a corporation provides one mechanism for encouraging cooperative engagement by a number of participants in a complex enterprise, each with different roles to play, and each making contributions that are at risk in the venture. The corporate form facilitates cooperation because it permits the participants to make credible commitments to each other to cooperate, and not to try to hold up the other participants by threatening to prematurely withdraw their contribution. They do so by yielding ultimate control over their contributions and over output from the enterprise to a board of directors.

The team production theory of corporate law points to the central and crucial role played by corporate directors. It also suggests that the norms and standards established for corporate directors and other corporate participants—the mutual expectations of trustworthy behavior—may be at least as important to corporate performance as laws and institutional arrangements.

Of course, there may be "bad apples" in any bushel. Some corporate actors will occasionally betray the trust that other corporate participants have placed in them even if the laws and institutional arrangements are strong, and the cultural messages supportive of trustworthy behavior on the part of corporate executives and board members.[49] But, if corporate leaders are continuously bombarded with messages that shareholder value is the only performance metric that matters, and if corporate directors and officers are compensated in ways that give them high-powered incentives to focus solely on shareholder value, then we should not be surprised to find that those officers and directors are more likely to neglect such niceties as honesty, personal integrity, and commitment to the mutual benefit of all the participants in the corporate enterprise.

The corporate scandals of the last year in the United States have caused even the most strident advocates of the shareholder primacy principle to begin to question the wisdom of a system too focused on share value. Harvard professor Michael Jensen, for example, now argues that the goal of corporations should be "enlightened value

maximization" which recognizes that "value maximization is not a vision or a strategy or even a purpose," but only a "scorecard" (Jensen 2001, p. 15). A team production approach to understanding corporations would suggest the same role for shareholder value, with the amendment that shareholder value is only one of a number of scorecards, all of which must be considered in judging overall corporate performance.

NOTES

1 See Hansmann and Kraakman (2001).

2 The "consensus on a shareholder-oriented model of the corporation results in part from the failure of alternative models of the corporation . . . . Since the dominant corporate ideology of shareholder primacy is unlikely to be undone, its success represents the 'end of history' for corporate law" (Hansmann and Kraakman, 2001). Professors Hansmann and Kraakman were not the only prominent specialists to believe that the market capitalism and shareholder primacy outperformed all other approaches to corporate governance. During the last few years of the 1990s and continuing at least to the fall of 2002, the World Bank has sponsored a series of training seminars in various developing and transition countries to preach the benefits of American-style corporate governance arrangements. The World Bank web site notes that "the activities of the Bank in corporate governance focus on the rights of shareholders, the equitable treatment of shareholders, the treatment of stakeholders, disclosure and transparency and the duties of board members." As of September 2002, the Bank had produced assessments of corporate governance practices in 15 countries, including Brazil, India, Turkey, Poland, the Philippines, and Georgia, and has, in partnership with the Organisation for European Co-operation and Development (OECD), organized regional "roundtables" on corporations to promote best practice. See http://www.worldbank.org/privatesector/cg/index.htm (accessed on Sept. 12, 2002).

3 "A simple comparison across countries adhering to different models—at least in very recent years—lends credence to the view that adherence to the standard model [the 'shareholder-oriented' model] promotes better economic outcomes. The developed common law jurisdictions have performed well in comparison to the principal East Asian and continental European countries, which are less in alignment with the standard model. The principal examples include, of course, the strong performance of the American economy in comparison with the weaker economic performance of the German, Japanese, and French economies" (Hansmann and Kraakman 2000, p. 12).

4 The return on a very broad-based market index, the Wilshire 5000, averaged a modest 8.36 percent return per year from 1995 through 2002. See *S&P US Indices*. Rev. Sept. 16, 2002. Online. Available at http://www.spglobal.com/June2002(USA).pdf.

5 See, e.g., J. E. Hilsenrath, "Growth in Productivity Slows; Forecasts for Economy Worsen," *Wall Street Journal*, Aug. 12, 2002, p. A2. See also J. M. Barry, "Economy Still Soft, Greenspan Warns; Fed Chief Cited Subdued Sectors," *Washington Post*, Dec. 20, 2002, p. E-1.

6 Shleifer and Vishny (1997, p. 746) summarize evidence that corporations made bad diversification decisions in the 1960s, 1970s, and 1980s, and in general paid too much for acquisitions.

7 Jensen and Ruback (1983) summarizes the early evidence. See Stout (1990) for an argument that the premia paid for acquired companies is not necessarily evidence that the acquirer expects to do a better job of managing the company.

8 Real (inflation adjusted) Gross Domestic Product (GDP) grew at 1.1 percent per year in

the last decade in Japan, at 1.99 percent per year in Europe, and at 3.3 percent per year in the United States. (Calculated from Organisation for Economic Co-operation and Development [OECD]. 2002. *Annual National Accounts: Comparative Tables Based on Exchange Rates and PPPs*. Rev. Sept. 16, 2002. Online. http://cs3hq.oecd.org/oecd/selected_view.asp?tableId=561&viewname=ANAPart2.)

9 See, e.g., OECD (1998, p. 27), in which the Business Sector Advisory Group on Corporate Governance stated that "most industrialized societies" recognize that the "generation of long-term economic profit to enhance shareholder value" is the corporation's primary objective. The *Principles of Corporate Governance*, adopted by the OECD in 1999 (OECD, 1999), took a somewhat attenuated shareholder primacy perspective, emphasizing shareholder rights, but also noting that "the competitiveness and ultimate success of a corporation is the result of teamwork that embodies contributions from a range of different resource providers . . .," and that "it is, therefore, in the long-term interest of corporations to foster wealth-creating co-operation among stakeholders" (OECD 1999, p. 33). See also Lazonick and O'Sullivan (2002).

10 The phrase is usually attributed to Jensen and Meckling (1976, p. 310), who argued that organizations "are simply legal fictions which serve as a nexus for a set of contracting relationships among individuals."

11 Yale professor Shyam Sunder (2001) notes that conventional accounting measures calculate the value created by corporations solely in terms of the value left over after other participants in the enterprise have been paid. He provides a fascinating discussion of the possibility of measuring the value created by the firm from the vantage point of participants other than shareholders.

12 Options, which are "derivative" securities that give the holder the right to buy the underlying security at a fixed price until some expiration date, become more valuable the more risky the underlying stock is because, like stockholders who have limited liability, option holders capture all the potential gain from gambles, but do not bear the downside risk.

13 But not before quite a few senior executives had managed to exercise their options and sell their stock, thus locking in their gains and leaving other stockholders and corporate claimants holding a greatly depleted bag.

14 See Blair and Stout (2001b) for an expanded explanation, based on options theory, of why maximizing value for shareholders is not equivalent to maximizing the total value created by the corporation.

15 Sunder (2001) notes that, since markets for financial capital are among the most liquid and efficient in the world, shareholder returns should, on average at least, always be equal to the opportunity cost of capital, and there should be no excess returns. By contrast, suppliers of other resources used in the corporation often provide specialized or unique inputs that might be able to demand a premium. From this point of view, one would expect that the only wealth being created by the firm would generally be captured by other participants, and not by the providers of financial capital. Sunder makes this point to call attention to the arbitrariness of measuring the value of a firm by looking only at its value to shareholders.

16 To prove that a market-determined price accurately reflects the true value of the security would require some independent way to measure the "true value." Hence any test of how close stock prices are to their true value is simultaneously and unavoidably a test of whether the model being used to measure the "true value" is a good model. If the market price varies from the price predicted by the model, we can never tell whether the problem is that the model is wrong, or the problem is that the market is not efficient in determining the price.

17 See, e.g., Shiller (2000), Stout (1990), and Stout (1997). Were stock prices in US financial markets overvalued in the early months of 2000 when the Dow peaked at more than 11,000, for example? Are they undervalued now? Is it conceivable that the fundamentals actually changed so much between the spring of 2000 and the summer of 2002 and that stock prices were accurate at both times?

18 Stout (2000) reviews the empirical evidence that complex information is incorporated into stock prices only slowly and incompletely.

19 Shareholder primacy advocate Michael Jensen (2001, p. 5) attacks "stakeholder theory," which he views as the only alternative to shareholder primacy, on the grounds that "it is logically impossible to maximize in more than one dimension at the same time," and that "stakeholder theory … leaves boards of directors and executives in firms with no principled criterion for problem solving" (p. 11). See also Monks and Minow (1995, p. 25). Of course this is only an issue if one feels compelled to describe corporate goals in terms of "maximization." Economists prefer the language of maximization because mathematical models can be used to describe a decision-making process based on maximization. But most organization theorists believe that in practice, no one knows what it means to "maximize" business goals, so that managers operate instead by setting challenging goals and trying to at least reach them. See Cyert and March (1963), on "satisficing."

20 See G. Ip, "New York Fed President Chides CEOs on Hefty Compensation; McDonough Urges Officials to Cut Their Pay, Citing Years of Outsized Gains," *Wall Street Journal*, Sept. 12, 2002, p. A-2.

21 Calculated from data in G. Strauss, "Why Are These CEOs Smiling? Must Be Payday; Analysis Shows That Top Executives Rarely Felt Shareholders' Financial Pain Last Year," *USA Today*, March 25.

22 See Ip, supra note 20.

23 "Dunlap Wants Stock Options Re-priced," *Palm Beach Post*, April 7.

24 Fraud charges were brought against Dunlap by the Securities and Exchange Commission (SEC), and numerous shareholders filed lawsuits after the accounting manipulations were revealed and Sunbeam's share price collapsed in 1998. These charges were finally settled in early September, 2002, when Dunlap agreed to pay out USD 15 million to settle the shareholder suits, and $500,000 to settle the fraud charges. Dunlap was also permanently banned by the SEC from ever serving as an official of a public company. See M. Schroeder, "Dunlap Settles Fraud Charges with the SEC," *Wall Street Journal*, Sept. 5, 2002, p. C-1.

25 Even shareholder primacy advocate Michael Jensen and his colleagues have come around to the view that corporate managers should not pursue short-term shareholder value maximization, noting that "an overvalued stock can be as damaging to the long-run health of a company as an undervalued stock," and warning of the dangers of the earnings expectations game. See Fuller and Jensen (2001). This concession, it should be noted, seriously undermines arguments Jensen and others made in the 1980s justifying hostile takeovers on the grounds that they offered shareholders of target firms an immediate gain on their investment.

26 Executives at companies that were competing with WorldCom reported such pressures to the *New York Times*. "Our performance did not quite compare and we were blaming ourselves," said Sprint chief executive William T. Esrey. See S. Schiesel, "Trying to Catch WorldCom Mirage," *New York Times*, June 30, 2002, Sect. 3, p. 1.

27 Stout (2002) notes that even if Bebchuk, Coates, and Subramanian are correct that the combination of staggered boards and poison pills reduces the returns to shareholders of companies that become takeover targets, this does not imply that the presence of takeover defenses in a firm are bad for shareholders. The problem is that Bebchuk et al. measure only the effect of the takeover defenses ex post, once the firm has become a takeover target, and they fail to measure the potential ex ante benefits to the firm and its shareholders from having the defenses in place. Takeover defenses may enhance a firm's ability to attract human capital and other resources, for example, precisely because they make the firm less likely to be taken over and broken up. See discussion below of the importance of "team production" in corporations.

28 See cites supra, note 3.

29 Bainbridge (2002) coined the phrase "director primacy."

30 For a summary of the efforts of TIAA-CREF to improve corporate governance, see Biggs (2002). For a summary of the corporate governance activities of CalPERS, see CalPERS web site at www.calpers-governance.org/forumhome.asp. See also the web sites of the Council of Institutional Investors, at www.cii.org/corp_governance.htm, and of the International Corporate Governance Network at www.icgn.org, and the chapter by W. D. Crist, chapter 16 in this volume. For an example of relatively intrusive engagement by an institutional shareholder in corporate governance, see B. Orwall, "Forum to Allow Disney Investors to Air Grievances," *Wall Street Journal*, Sept. 12, 2002, p. A-6, noting that Providence Capital of New York was planning to host a meeting of institutional investors for the purpose of finding out their views on the corporate governance practices at Walt Disney Co.

31 Coates (1999, Abstract) notes that "two decades of empirical research on poison pills and other takeover defenses does not support the belief—common among legal academics—that defenses reduce firm value."

32 MacAvoy and Millstein (1999) argue that nominal independence of board members may not by itself bear any strong relationship to whether a board is active and independent in its action. They construct a measure of board independence based on a survey of board practices (including such things as whether nonmanagement directors meet independently of management on a regular basis), and find that evidence of independent board action is positively correlated with a measure of performance that is a variation on Economic Value Added (EVA). See Rappaport (1986) for an explanation and discussion of the concept of and method of measuring EVA.

33 Professor Bernard Black has suggested that corporate governance details may be very important in settings where courts aren't functioning, regulation is corrupt, and there are no institutions in place that can prevent theft of corporate resources by insiders. For example, he compares the performance of 21 major Russian corporations that have publicly-traded securities with their rankings on an index of their corporate governance practices. He finds that all of the companies trade at a huge discount relative to their Western counterparts, but that companies with good corporate governance practices are discounted much less than companies with poor governance practices. The most well-governed company in the sample, telephone company Vimpelcom, trades at a discount of about 50 percent relative to comparable companies in Europe and the United States, while the worst-governed company, Yuganskneftegas, an oil company, trades at 100th of 1 percent of its estimated potential value in the west.

34 It is virtually impossible to draft and enforce complete contracts, fully specifying the terms of the long-term relationships among the team members, without introducing perverse

incentives into the relationship. If team members agree in advance that they are going to split the proceeds evenly, for example, then everyone will have an incentive to shirk, since they will get the same share of the output no matter how hard they work. But if they do not agree to a distribution rule in advance, the team could easily fall apart as they argue with each other over the proceeds.

35 See, e.g., Del. Code Ann. tit. 8, §106.

36 Recall the discussion above, however, in which I argue that such designation is not accurate legally, but is at best a convenient, if misleading, metaphor.

37 See, e.g., *Auer v. Dressel*, 118 N.E. 2d 590, 593 (NY 1954), holding that directors have no obligation to respond to a shareholder resolution demanding reinstatement of a dismissed officer.

38 See, e.g., *Kamin v American Express Co.*, 86 Misc. 2d 809, 383 N.Y.S. 2d 807 (1976), aff'd on opinion below, 54 A.D.2d 654, 387 N.Y.S. 2d 993 (1st Dept. 1976) noting that whether or not to pay a dividend is "exclusively a matter of business judgment for the Board of Directors".

39 The "business judgment rule" is a doctrine adopted by the courts which says that the courts should presume that "in making a business decision the directors of a corporation acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company" (Aronson v. Lewis, 473 A.2d 805, 812 [Del. 1984]).

40 Shareholders must be given a chance to vote for directors, but existing directors nearly always nominate the slate to be voted on. Shareholders must also be given a chance to vote on certain fundamental corporate changes such as a sale of all or substantially all of the assets of the firm, or a merger in which the company will cease to be an independent firm. See discussion of shareholder voting rights in Blair and Stout (1999, pp. 309–315). And, under proposed new stock exchange rules, shareholders must be given a chance to vote on stock option-based compensation plans. See NYSE 2002; Nasdaq 2002. These are the only decisions that must be subjected to shareholder vote by law, although incorporators may specify in the corporate charter that a vote of shareholders is required for other decisions.

41 See Restatement (Second) of Agency § 14C cmt. a (1958), stating that directors owe duties to "the corporation itself rather than to the shareholders individually or collectively". Some case law describes directors' fiduciary duties as running to the corporation and its shareholders, but extensive case law authorizing directors to consider nonshareholder interests in deciding what is best for the corporation makes it clear that directors' duties are not limited to shareholders but are owed to the corporation generally. Blair and Stout (1999, note 105).

42 See discussion of rules of derivative suits in Blair and Stout (1999, pp. 292–297).

43 This requires a showing that directors have a conflict of interest that is so substantial that it would influence their judgment in deciding whether to pursue the case.

44 Most management literature addresses corporate performance in a multidimensional way, and even economic analysis of firm performance from the perspective of industrial organization theory (as opposed to finance theory) uses a multidimensional approach. Scherer and Ross (1990, pp. 4–5), for example, suggest that corporate performance should be evaluated on the basis of "production and allocative efficiency, progress, full employment [and] equity."

45 Business consultant Allan Kennedy has argued that many companies in the last two decades have been "mortgaging their future in pursuing shareholder value to the exclusion of other stakeholders—employees, governments, communities, suppliers, and customers." See "The

End of Shareholder Value," interview with Kennedy by Jane Christophersen, published in *Shareholder Value Magazine*, July/Aug. 2001, p. 38. See also Kennedy (2000).

46 Tirole (1986, p. 208) notes that "it is widely recognized by sociologists that without the countless acts of cooperation that take place everyday between members, most organizations would break down."

47 Williamson (1985, p. 249) notes that courts refuse to get involved in disputes between divisions of a corporation over transfer prices or the allocation of a bonus pool, referring to matters such as these as within the "zone of acceptance," in which participants of the corporation must accept the decision of the internal hierarchical decision-making process of the corporation.

48 Former Chancellor of the Delaware Court William T. Allen has emphasized the importance of factors such as "reputation, pride, fellowship, and self-respect" in determining how active and effective corporate directors are in guiding a corporation toward strong overall performance. See Allen (1993, p. 11).

49 Sally (1995) finds evidence that the cooperation rate in social dilemma games can be made to vary from as low as 5 percent to as high as 95 percent, depending upon a variety of contextual variables and social signals. While dramatizing the importance of social and cultural context in eliciting cooperative behavior, this finding also confirms that there will be some "bad apples" no matter what, which may explain why law and institutions also matter.

REFERENCES

Allen, W. T. 1993. "Corporate Governance: The Internal Environment." Unpublished memorandum to 1993 Fifth Tulane Corporate Law Institute.

Bainbridge, S. M. 2002. "Director Primacy: The Means and Ends of Corporate Governance," UCLA School of Law Research Paper No. 02-06. Los Angeles, CA: University of California Los Angeles.

Bebchuk, L. A., J. C. Coates IV, and G. Subramanian. 2002. "The Powerful Antitakeover Force of Staggered Boards: Theory, Evidence, and Policy," Stanford Law Review 54, pp. 887–951.

Bhagat, S., and B. Black. 2002. "The Non-Correlation Between Board Independence and Long-Term Firm Performance," Journal of Corporation Law 27, pp. 231–273.

Bhagat, S., and R. H. Jefferis, Jr. 2002. *The Econometrics of Corporate Governance Studies*. Cambridge, MA: MIT Press.

Bhagat, S., B. Black, and M. Blair. Forthcoming. "Relational Investing and Firm Performance," Journal of Financial Research.

Bhagat, S., A. Shleifer, and R. Vishny. 1990. "Hostile Takeover in the 1980s: The Return to Corporate Specialization," *Brooking Papers on Economic Activity: Microeconomics*, pp. 1–72.

Biggs, J. H. 2002. "Corporate Failure and Corporate Governance," TIAA-CREF Participant Aug., pp. 2–3.

Black, B. S. 1992. "The Value of Institutional Investor Monitoring: The Empirical Evidence," UCLA Law Review 39, pp. 895–939.

Black, B., and R. Kraakman. 1996. "A Self-Enforcing Model of Corporate Law," Harvard Law Review 109, pp. 1911–1981.

Blair, M. M. 1994. "CEO Pay: Why Such a Contentious Issue?" Brookings Review 12, pp. 23–37.

Blair, M. M. 1995. *Ownership and Control: Rethinking Corporate Governance for the Twenty-first Century.* Washington, D.C: Brookings Institution Press.

Blair, M. M., and L. A. Stout. 1999. "A Team Production Theory of Corporate Law," Virginia Law Review 85, pp. 247–328.

Blair, M. M., and L. A. Stout. 2001a. "Trust, Trustworthiness, and the Behavioral Foundations of Corporate Law," University of Pennsylvania Law Review 149, pp. 1735–1810.

Blair, M. M., and L. A. Stout. 2001b. "Director Accountability and the Mediating Role of the Corporate Board," Washington University Law Quarterly 79, pp. 403–447.

Bratton, W. 2002. "Enron and the Dark Side of Shareholder Value," Tulane Law Review 76, pp. 1275–1362.

Byrne, J. A. 1999. "Chainsaw: He Anointed Himself America's Best CEO," Business Week Oct. 18, 1999, pp. 128–149.

Cheit, R. M., and J. March. 1963. *A Behavioral Theory of the Firm.* Englewood Cliffs, NJ: Prentice-Hall.

Clark, R. C. 1986. *Corporate Law.* Boston: Little, Brown and Co.

Clark, R. C. 1987. "Agency Costs Versus Fiduciary Duties." In J.W. Pratt and R. J. Zeckhauser, eds., Principals and Agents: The Structure of Business. Cambridge, MA: Harvard Business School Press.

Coates, J. C. IV. 1999. "The Contestability of Corporate Control: A Critique of the Scientific Evidence on Takeover Defenses," OCL Discussion Paper No. 265. Cambridge, MA: Harvard University John M. Olin Center for Law, Economics, and Business.

Coates, J. C. IV. 2001. "Explaining Variation in Takeover Defenses," California Law Review 89, pp. 1301–1389.

Comment, R., and W. Schwert. 1995. "Poison or Placebo? Evidence on the Deterrence and Wealth Effects of Modern Antitakeover Measures," Journal of Financial Economics 39, pp. 3–43.

Cyert, R. M., and J. G. March. 1963. *A Behavioral Theory of the Firm.* Englewood Cliffs, NJ: Prentice-Hall.

Daines, R., and M. Klausner. 2001. "Do IPO Charters Maximize Firm Value? Antitakeover Protection in IPOs," Journal of Law, Economics, and Organization 17, pp. 83–118.

Danielson, M. G., and J. M. Karpoff. 2002. "Do Pills Poison Operating Performance?" Working Paper. Online. http://papers.ssrn.com/abstract=304647.

Dertouzos, M., R. Lester, R. Solow, and the MIT Commission on Industrial Productivity. 1989. *Made in America: Regaining the Productive Edge.* Cambridge, MA: MIT Press.

Easterbrook, F., and D. Fischel. 1991. *The Economic Structure of Corporate Law.* Cambridge, MA: Harvard University Press.

Fama, E. F. 1970. "Efficient Capital Markets: A Review of Theory and Empirical Work," Journal of Finance 25, pp. 383–423

Fama, E. F. 1998. "Market Efficiency, Long-Term Returns, and Behavioral Finance," Journal of Financial Economics 49, pp. 238–306.

Fama, E. F., and M. C. Jensen. 1983. "Separation of Ownership and Control," Journal of Law and Economics 26, pp. 301–325.

Fuller, J., and M. C. Jensen. 2001. "Just Say No to Wall Street," TSB Working Paper No. 02–01. Hanover, NH: Amos Tuck School of Business at Dartmouth College.

Gillan, S. L. 2001. "Option-Based Compensation: Panacea or Pandora's Box?" Journal of Applied Corporate Finance 14, pp. 115–128.

Hansmann, H., and R. Kraakman. 2001. "The End of History for Corporate Law," Georgetown University Law Review 89, pp. 439–468.

Hill, J. G. 1999. "Deconstructing Sunbeam—Contemporary Issues in Corporate Governance," University of Cincinnati Law Review 67, pp. 1099–1127.

Jacobs, M. T. 1991. *Short-Term America: The Causes and Consequences of Our Business Myopia*. Cambridge, MA: Harvard Business School Press.

Jarrell, G. A., J. A. Brickley, and J. M. Netter. 1988. "The Market For Corporate Control: The Empirical Evidence Since 1980," Journal of Economic Perspectives 2, pp. 49–68.

Jensen, M. C. 1986. "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers," American Economic Review 76, pp. 323–329.

Jensen, M. C. 1988. "Takeovers: Their Causes and Consequences," Journal of Economic Perspectives 2, pp. 21–48.

Jensen, M. C. 1989. "Eclipse of the Public Corporation," Harvard Business Review 67, pp. 61–74.

Jensen, M. C. 1993. "The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems," Journal of Finance 48, pp. 831–880.

Jensen, M. C. 2001. "Value Maximization, Stakeholder Theory, and the Corporate Objective Function," TBS Working Paper No. 01-09. Hanover, NH: Amos Tuck School of Business at Dartmouth College.

Jensen, M. C., and W. H. Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," Journal of Financial Economics 3, pp. 305–360.

Jensen, M. C., and R. S. Ruback. 1983. "The Market for Corporate Control: The Scientific Evidence," Journal of Financial Economics 11, pp. 5–50.

Kaplan, S., and J. Stein. 1993. "The Evolution of Buy out Pricing and Financial Structure in the 1980s," Quarterly Journal of Economics 108, pp. 313–357.

Kennedy, A. 2000. *The End of Shareholder Value: Corporations at the Crossroads*. Cambridge, MA: Perseus Publishing.

Koppes, R. H., L. G. Ganske, and C. T. Haag. 1999. "Corporate Governance Out of Focus: The Debate Over Classified Boards," Business Law 54, pp. 1023–1055.

Lazonick, W., and Mary O'Sullivan. 2002. "Maximizing Shareholder Value: A New Ideology for Corporate Governance." In W. Lazonick and M. O'Sullivan, eds., Corporate Governance and Sustainable Prosperity. New York: Palgrave.

Long, W. F., and D. J. Ravenscraft. 1993. "Decade of Debt: Lessons from LBOs in the 1980s." In M. M. Blair, ed., The Deal Decade: What Takeovers and Leveraged Buyouts Mean for Corporate Governance. washington, DC: Brookings Institution Press.

MacAvoy, P., and I. M. Millstein. 1999. "The Active Board of Directors and Its Effect on the Performance of the Large Publicly Traded Corporation," Journal of Applied Corporate Finance 11, pp. 8–20.

Malatesta, P., and R. Walkling. 1988. "Poison Pill Securities: Stockholder Wealth, Profitability, and Ownership Structure," Journal of Financial Economics 20, pp. 347–376.

Manne, H. 1965. "Mergers and the Market for Corporate Control," Journal of Political Economy 75, pp. 110–126.

Martin, K., and J. McConnell. 1991. "Corporate Performance, Corporate Takeovers, and Management Turnover," Journal of Finance 46, pp. 671–688.

McConnell, J., and H. Servaes. 1990. "Additional Evidence on Equity Ownership and Corporate Value," Journal of Financial Economics 27, pp. 595–612.

Monks, R. A. G., and N. Minow. 1995. *Corporate Governance*. Cambridge: Blackwell Business.

Morck, Randall, Andrei Shleifer, and Robert Vishny. 1988a. "Characteristics of Targets of Hostile and Friendly Takeovers." In A. Auerbach, ed., Corporate Takeovers: Causes and Consequences. Chicago: University of Chicago Press.

Morck, R., A. Shleifer, and R. Vishny. 1988b. "Management Ownership and Market Valuation: An Empirical Analysis," Journal of Financial Economics 20, pp. 293–315.

Morck, R., A. Shleifer, and R. Vishny. 1989. "Alternative Mechanisms of Corporate Control," American Economic Review 79, pp. 842–852.

National Association of Securities Dealers Automated Quotation (Nasdaq). 2002. Summary of Nasdaq Corporate Governance Proposals As of September 13, 2002. Rev. Sept. 16, 2002. Online. http://www.nasdaqnews.com/about/corpgov/CorpGovProp0913.pdf.

Neumark, D., and S. A. Sharpe. 1996. "Rents and Quasi Rents in the Wage Structure: Evidence from Hostile Takeovers," Industrial Relations 35, pp. 145–179.

New York Stock Exchange (NYSE). 2002. Corporate Governance Proposals Reflecting Recommendations from the NYSE Corporate Accountability and Listing Standards Committee As Approved by the New York Stock Exchange Board of Directors," August 1, 2002. Rev. Sept. 12, 2002. Online. http://www.nyse. com/about/report.html.

Organisation for Economic Co-operation and Development (OECD). 1998. Corporate Governance: Improving Competitiveness and Access to Capital in Global Markets: A Report to the OECD by the Business Sector Advisory Group on Corporate Governance. Paris: Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development (OECD). 1999. Principles of Corporate Governance. Paris: Organisation for Economic Co-operation and Development.

Palepu, K. 1986. "Predicting Takeover Targets: A Methodological and Empirical Analysis," Journal of Accounting and Economics 8, pp. 3–35.

Pontiff, J., A. Shleifer, and M. S. Weisbach. 1990. "Reversions of Excess Pension Assets after Takeovers," Rand Journal of Economics 21, pp. 600–613

Porter, M. E. 1992. *Capital Choices: Changing the Way America Invests in Industry*. Washington, DC: Council on Competitiveness and Harvard Business School.

Rappaport, A. 1986. *Creating Shareholder Value: The New Standard for Business Performance*. New York: Free Press.

Ryngaert, M. 1988. "The Effect of Poison Pill Securities on Shareholder Wealth," Journal of Financial Economics 20, pp. 377–417.

Sally, D. 1995. "Conversation and Cooperation in Social Dilemmas: A Meta-Analysis of Experiments from 1958 to 1992," Rationality and Society 7, pp. 58–93.

Scharfstein, D. 1988. "The Disciplinary Role of Takeovers," Review of Economic Studies 55, pp. 185–199.

Scherer, F.M., and D. Ross. 1990. *Industrial Market Structure and Economic Performance, 3rd edition*. Boston: Houghton Mifflin.

Shiller, R. 2000. *Irrational Exuberance*. Princeton, NJ: Princeton University Press.

Shleifer, A. 2000. *Inefficient Markets: An Introduction to Behavioral Finance*. Oxford: Oxford University Press.

Shleifer, A., and L. H. Summers. 1988. "Breach of Trust in Hostile Takeovers." In A. J. Auerbach, ed., Corporate Takeovers: Causes and Consequences. Chicago: University of Chicago Press.

Shleifer, A., and R. W. Vishny. 1988. "Value Maximization and the Acquisition Process," Journal of Economic Perspectives 2, pp. 7–20.

Shleifer, A., and R. W. Vishny. 1997. "A Survey of Corporate Governance," Journal of Finance 52, pp. 737–783.

Stein, J. 1989. "Takeover Threats and Managerial Myopia," Journal of Political Economy 96, pp. 61–80.

Stout, L. A. 1990. "Are Takeover Premiums Really Premiums? Market Price, Fair Value, and Corporate Law," Yale Law Journal 99, pp. 1235–1296.

Stout, L. A. 1997. "How Efficient Markets Undervalue Stocks: CAPM and ECMH Under Conditions of Uncertainty and Disagreement," Cardozo Law Review 19, pp. 475–492.

Stout, L. A. 2000. "Stock Prices and Social Wealth," HLS Discussion Paper No. 301. Cambridge, MA: Harvard Law School.

Stout, L. A. 2002. "Do Antitakeover Provisions Decrease Shareholder Wealth? The Ex Post/Ex Ante Measurement Problem," Stanford Law Review 55, pp. 845–861.

Sunder, S. 2001. "Value of the Firm: Who Gets the Goodies?" ICF Working Paper No. 02-15. New Haven, CT: International Center for Finance at the Yale School of Management.

Tirole, J. 1986. "Hierarchies and Bureaucracies: On the Role of Collusion in Organizations," Journal of Law, Economics, and Organization 2, pp. 181–214.

Twentieth Century Fund. 1992. Report of the Task Force on Market Speculation and Corporate Governance. New York: Twentieth Century Fund Press.

United States General Accounting Office (US GAO). 1993. "Competitiveness Issues: The Business Environment in the United States, Japan, and Germany," GAO/GGD-93-124. Washington, DC: United States General Accounting Office.

Williamson, O. E. 1985. *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*. New York: Free Press.

Wruck, K. 1989. "Equity Ownership Concentration and Firm Value," Journal of Financial Economics 23, pp. 3–28.

BIOGRAPHY FOR MARGARET M. BLAIR

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About Professor Blair

Margaret Mendenhall Blair is an economist who focuses on business and management law. She joined the Vanderbilt faculty in 2004 as part of the team supporting the Law and Business program, which the law school offers in conjunction with the Owen Graduate School of Business at Vanderbilt. She moved to Vanderbilt from Georgetown University Law Center, where she became a visiting professor in 1996 and from January 2000 to June 2004 served as a Sloan Visiting Professor, teaching Corporations and Corporate Finance, and as Research Director for the Sloan-GULC Project on Business Institutions. She has also been a Senior Fellow in the Economic Studies Program at the Brookings Institution, where she wrote about corporate governance and the role of human capital in corporations. Her current research focuses on three areas: the legal structure of business organizations, team production issues and the theory of the firm, and the role of corporations in globalization. She served on the Board of Directors of Sonic Corporation from January 2001 through January, 2006, and current serves on the Board of WRAP (Worldwide Responsible Apparel Production).

Representative Publications

"The New Role for Assurance Services in Global Commerce," with Cynthia A. Williams and Li-Wen Lin, 33 *JOURNAL OF CORPORATION LAW,* 2, 325–360 (Winter 2008).

"Locking in Capital: What Corporate Law Achieved for Business Organizers in the Nineteenth Century," 51 *UCLA L. Rev.* 2 (December 2003). Republished in *Top 10 Corporate Practice Commentator* (2004).

Unseen Wealth: Report of the Brookings Task Force on Intangibles (author and editor, with Steven M.H. Wallman), Brookings, 2001. Chinese translation distributed by the Chinese Social Science Publishing House. Japanese translation distributed by Chuokeisai-Sha Publishing Company.

Trust, Trustworthiness, and the Behavioral Foundations of Corporate Law, (with Lynn Stout), 149 *UNIVERSITY OF PENNSYLVANIA LAW REVIEW* 1735–1810 (November 2000).

A Team Production Theory of Corporation Law, (with Lynn Stout), 85 *VIRGINIA LAW REVIEW* (March 1999).

Ownership and Control: Rethinking Corporate Governance for the Twenty-first Century, Brookings 1995. Chinese translation republished by the Chinese Social Science Publishing House, Beijing. This book won an academic book publishers award.

Chairman MILLER. Dr. Scott.

STATEMENT OF DR. BRUCE R. SCOTT, PAUL WHITON CHERINGTON PROFESSOR OF BUSINESS ADMINISTRATION, HARVARD BUSINESS SCHOOL

Dr. SCOTT. Thank you, Mr. Chairman. I teach at a business school and started my studies looking at how firms are managed and doing case writing here and in Europe and switched from that to looking at those same ideas at the level of countries and saying countries have strategies as well.

This has been a very lonely thing to be doing for the last 20 years. It really has. It has been completely out of touch with what is going on in most of organized economics. It is very strange to see this beginning to be used as a set of terms and saying, we have to think about it differently.

Having said that, what I would like to say to you is that if you think about this problem in terms of globalization, you are never going to get there. Globalization means you are integrating the

markets, that is all. There is another way to look at it which is how the countries are managed, which has something to do with what you people on this Committee do all the time; and the operational way to think about this is in terms of the government's systems that operate within all the countries. Capitalism is a system of governance for economic affairs; democracy is the one that almost everybody uses for the political affairs. But you have got two governance systems that are working together that influence each other all through this, and you need to begin to pick that up I think as a way to see what you can do. It is very hard to do this, and certainly, teaching at a business school, most people simply turn off and say, "It is too hard to do this. I can't figure out how the pieces fit together."

So let me suggest there is a way to think about this that is simple enough that anybody can catch it very quickly. The analogy is that organized competition in all the major sports is organized the same way a capitalist system is in a country. It is a three-level system that starts with a political authority. It depends upon which one of those sports you like, but if it is football, it is the NFL. If it is baseball, it is Major League Baseball. They operate as a political authority. They operate—so that they can operate as a state. Now, every one of these has the power to create the rules. They decide who gets hired as the regulators and referees. You have a set of institutions, the rules, the regulations, everything, which is exactly the same as a capitalist system. I had somebody I was talking with a couple of weeks ago about this who is a Canadian banker, and he said, "Well, I am really uncomfortable about this notion of regulation." I asked, "Well, do you watch hockey?" "Yeah, of course I watch hockey." "How would it work if you had no referees?" "Unimaginable." Well, it is the same thing. You can't—and if you are on Financial Services, Mr. Chairman, you must have had at least the chance to think about what happens when we have the number one regulator in the financial services sector say, "I really think the private sector can do it without government." That is how we got to where we are. Football would work that way, hockey would work that way, all of them would work that way if you don't have rules, the referees, and—most of what we focus on is the games. The games and the sports correspond to the markets that you see in capitalism.

Well, if I turn from the sports to capitalism, you just say, look, it is the same three levels. You have a government, that is you in this, the rules and then the market framework. And thinking about it this way gives you something that is easy to work with. If you have ever watched football, you have got to recognize that—and especially for the men—you end up saying, I have got to watch until the last two minutes, you can't tell who is going to win.

Yeah, but that is basically because the National Football League organized and said, "We are going to split the television revenues equally. Green Bay is going to have the same television revenues as Los Angeles or Boston or anybody else. We are going to equalize the revenues. Our function is close games. Close games get people watching until the last of the game, and that is what sells the advertising revenue."

If I go to baseball, they have not done that yet. They have teams that have five, six times the revenue of other teams. Football decided that entertainment was best when the games were close. The purpose of the capitalist system is very different, but the governance process is just exactly—I mean, this three-level governance system works as a way to understand it.

Most of our attention, I think, in the description of how capitalism works, is built around the product markets. That is the part we see, and that is the fruit stand, the automobile dealership, whatever else. The really decisive things that distinguish one country from another are not in the product markets, they are in the factor markets, meaning: How do you deal with land, how do you deal with labor, how do you deal with financial capital, how do you deal with intellectual property? And unlike the simple-minded models that are used so much of the time where we assume that we have got voluntary transactions among people that are consenting adults that have equal information, there is virtually no way to get equal relations in the factor markets. You are dealing with unequal power as well as unequal information.

All you have to do is think about somebody going to apply for a job. The organization that you are applying to may be 100 people, it may be 1,000 people, it may be 100,000 people. There just aren't equal relationships in there. You have to have rules and regulations in how these things work to make it at all a plausible thing in a democratic society. It can be done, but that is not the problem. The problem is recognizing the fact that we are not dealing with equal relationships, especially not in the factor markets.

Let me take this—I was just thinking just what you were talking about with the competition and the model of it. This is a homely little chart, a model of unregulated competition has existed for a long time. The Brits had it in the Middle Ages. It is the common pasture, and just imagine that we have got a bunch of poor people that live in those little brown houses to the side of it, and we have got one big house. And so the castle there has got his grounds, the other folks don't have much, but the other folks share the common. They can take their goats or their cattle or whatever they are onto the common, and if it is an unrestricted system, what happens is you keep on adding cattle until you destroy the common. And people understood that the way to do this was—and in the British case, what they did was sell—privatize. And then we are going to have somebody in control, and we won't have the excessive usage and in addition we will have people that will invest money to improve it, to drain it, to change what we do from one crop to another.

Well, this is a useful thing to think about because there really are several ways to deal with this, but the easiest one to think about is, that it is not an insoluble problem at all. All you've got to do is have a fence around the common, have a gate, and have somebody at the gate.

If the somebody at the gate is a legitimate gate keeper, he can just say, "Look, you are on Mondays and Wednesdays and your staff is on Tuesdays and Thursdays and this is all you can have." But, you got to have either legitimacy or you got to have coercive power to manage the gate. Much the same thing is true when you

are thinking about your global economy. That is exactly what the circumstances are. The biggest of the common resources is not the land for the grass. It is the savings of a society, it is the technologies of a society, and in my sense, above all, it is the legal frameworks that are effectively the collective capital of the capitalist system. Just take as an example a country that joins Western Europe at this stage, the EU. If you ask, what are the terms of joining, the terms of joining are you must accept the whole framework, and the whole framework used to mean a few hundred pages, then a few thousand pages. Now a new member that joins Europe has to sign on for 100,000 pages of regulation, and there is no discussion. You either sign up for it or you can't belong. But, that is the accumulated wisdom of somebody building this thing up over a period of time. That is one of the most precious things that they have.

If I take this and say what is it applied to the United States, the United States was set up in an utterly unusual set of circumstances because the Constitution gave the right to charter firms to the states. So, they start of with in effect 13 people, 13 organizations that can charter firms to compete in the market. And then the right to regulate the competition was held by the Federal Government. Well, it very quickly got us into a set of circumstances as soon as we got the continental market, we began to have abuse of the market just exactly like the folks grazing on the common. And the most obvious abuse turned out to be companies trying to have holding companies and quasi-monopolies. And they were prohibited from doing that by every state until New Jersey changed its law. And in 1888, New Jersey authorized holding companies, and we have a rush to incorporate in New Jersey, then New York, and then in Delaware; and you change the whole structure, both of the firms and of competition in the United States, not by act of Congress, but by the vote of a State legislature.

Congress tries to come back and find a way to deal with this, and Theodore Roosevelt is the first one that I think really understood what he was doing, saying, "We are going to have to create something that has a regulatory framework that corresponds to the global market." So they brought back the idea of the federal charter. Federal charter was initially posed by Madison at the Constitutional Convention, and people decided that if it had been put in the Constitution, the chances were the Constitution would never have been ratified. It would have symbolized too much power in the hands of the Federal Government. So there was no federal charter. You had initially 13—it is ineffective commons with 13 gates to start with. As you go along it goes to 30, then 40, then 50. So you have no regulation of who uses it. You have to have a regulatory regime that has oversight over the whole thing, and Roosevelt recognized we didn't have that. And so he and William Howard Taft both proposed for over a period of about 11 years that they either create a federal license or a federal charter which is the same thing. And they can't get it through. The hitch is when we got the big companies, we ended up with big companies having enough power to dominate State legislatures. State legislatures were appointing people who were not going to allow the regulation of the firms.

How about if I stop there?
[The prepared statement of Dr. Scott follows:]

PREPARED STATEMENT OF BRUCE R. SCOTT

U.S. Capitalism: a system of governance is challenged

Mr. Chairman and Members of the Committee:

I am a faculty member of the Harvard Business School, and have been for many years. My initial field of study was in General Management, meaning the strategies and governance of firms. I migrated from that field to its analog at the country level in the 1960s while studying French attempts to formally plan their economic development.

In recent years I have been working on a book entitled *Capitalism, Democracy and Development*.[1] The title of the book is indicative of a shift in my own thinking from a focus on substantive economic strategies of countries to a focus on the processes of governance. From my comparative case studies on countries it has gradually become clear to me that much of a nation's economic strategy is embedded in the institutions through which that particular nation is governed, and that the existence of institutions imply a certain strategy. For instance, deregulation in the U.S. as practiced since 1980 was a strategy designed to promote efficiency but it was also designed to favor capital at the expense of labor. Likewise, tolerance for the omission of the cost of stock options from profit and loss statements was nominally a way to promote performance, but also implicitly a strategy for redistributing wealth in favor of those with the power to secure grants of such options.

In this paper I will introduce several ideas from my book and then append some pages of explanation from two chapters of the text.

Capitalism is a system of governance

If there is one idea that I would urge this committee to consider in its studies of the offshoring process, it is to go beyond a focus on markets to consider how capitalism works as a system of governance for economic affairs. Markets are part of that system of governance, with the invisible hand acting as an automatic form of governance within the prescribed frameworks of the markets. But markets are only part of the system, and a dependent part at that. All formal or organized markets require laws, regulations and physical and social institutions for their underpinnings. These laws and institutions are created through human agency and as a result they are likely to differ in significant aspects from one nation to another. These institutional variances imply that there are different variants of capitalism, and this in turn implies that the so-called Anglo-American style of capitalism is but one style. We should not assume that other countries are trying to be more like us unless we have sound empirical research to so indicate. In the meantime, we should pay close attention to the idea that capitalism is a system of governance where other countries could have economic strategies quite different from our own.

Gabriel Almond, a professor of political science at Stanford and former president of the American Political Science Association, called attention to this notion of capitalism as a system of governance when he wrote that the economy and the polity are the two chief problem-solving systems of a society, interacting with and transforming each other, as suggested in Slide number one. Almond's idea was expressed in an article in *Political Science and Politics* titled "Capitalism and Democracy" and thus I understand "economy" and "polity" to more specifically reference "capitalism" to "democracy," respectively. Thus, in his view and mine as well, capitalism refers to something very different from globalization—and if today you frame your inquiry in terms of the former, meaning comparative capitalist systems, your inquiry may take you in quite a different direction.

To explain: Globalization refers to the integration of markets, and market integration is being driven by very powerful forces such as declining transport costs and trade barriers, as we all know. Firms operate within markets and are greatly influenced by the forces of supply and demand that are manifested within them. Firms must learn to adjust to those market forces if they are to survive, let alone prosper. However, the market frameworks themselves are created, legitimated, monitored and periodically modernized by government and not by economic actors. To frame your inquiry in terms of how globalization works will risk ignoring how the markets

[1] Scheduled for publication later this year by Springer Verlag, Heidelberg.

have been structured and how these structures determine the actual operations that take place within the markets.

The market frameworks that facilitate and constrain economic activity are created through legislatures; as a result, they reflect the relative power of different interest groups in the political markets of legislatures at any point in time, as you all know better than I. It is legislative markets that create the frameworks within which firms operate, and the frameworks that underpin economic markets can be tilted to favor capital versus labor or the reverse, producers versus consumers, lenders versus creditors, and so on. The notion that the economic markets of capitalism somehow reflect a benign set of circumstances where parties voluntarily come together to achieve mutually beneficial transactions may be an adequate description of commerce at a roadside fruit and vegetable stand or a flea market, but not for much of the transactional activity of a modern economy. This notion of a benign, self regulating capitalism where almost all transactions are voluntary and therefore mutually beneficial is based upon an unexamined assumption that the legislative markets have done their job in a flawless way to begin with, which would be quite remarkable if true. Thus, as a more realistic alternative I suggest that we see capitalism as a three level system of governance which is designed to mediate commerce among actors with different purposes, different access to information, and radically different access to economic power as well.

Capitalism as a three level system of governance

Capitalism is a concept which has been used to describe processes of governance that are partly political, partly legal and partly economic, and which interact in a system or systems that continue to evolve through time. It is not surprising that such a complex system has defied any standard definition for more than a century and that many books that analyze capitalist development do not even attempt to define it.[2] Given this situation, I have found it very helpful to define capitalism relative to some much smaller, simpler and more tractable governance systems, notably those for organized sports Thus, as shown in Slide number two, I define capitalism as an indirect, three level system for the governance of economic activities analogous to those used to govern team sports such as baseball, basketball, football and hockey. As in the governance of these sports, the essential principle is that the economic agents, like their analogs in sports, are free to use their powers as they wish, whether as individuals or as members of a firm, so long as they stay within the physical bounds of the competitive arena, and so long as they obey the rules and regulations of their particular capitalist system. I spell these ideas out more fully in three excerpts from Chapter 2 of my book, which are attached.

Crudely put, the three levels consist of the economic markets, the legal and other institutions that underpin those markets, and the political level through which new institutions are created and older ones maintained and modified. These three levels permit the harnessing of human energy that is called forth through competition, whether among sports teams, firms or individuals. The actions of the competitors are coordinated in part by their own social organizations (teams or firms) and in part by the rules, regulations and institutions that govern the competition, but in any event not by an immediate hierarchical authority with or without a central plan. Hence capitalism is an indirect system of governance, in contrast to one that is governed directly through a hierarchy.

Slide number three shows the three level model in more detail, distinguishing the factor markets (e.g., those for land, labor, capital and intellectual property) from those for goods and services. The distinction is very important for two reasons. First, historically speaking, it was the establishment of factor markets and not the trade in product markets that was the hallmark of capitalism. While some scholars have claimed that the Aztecs had "capitalism" before the Spanish arrived, I disagree. In 1500 the Aztecs, like most of the known world, did not have free mobility for land or labor; they had feudalism and even forced labor instead. Trade was compatible with feudalism but free mobility of land and labor were not. And, as we remember from Shakespeare's Shylock, returns on financial capital were not seen to be legitimate in Venice pre-1600.

The second reason for calling attention to the factor markets is that they are the frameworks for the development and trade of resources, and thus a prime area where a government can influence its developmental prospects. Governments can favor saving versus consumption, for instance, and a number of East Asian nations have had saving rates at more than twice the American level since World War II.

[2] Cf. Fernand Braudel, Civilization and Capitalism, 1400–1800, Volume 2, page 237 for some of the history of definitions.

This has allowed them to finance growth rates superior to ours without the need to be open to foreign capital, for example in China in recent decades. Higher saving rates can be achieved through restrictions on consumer credit, high down payments on consumer durables such as housing, or mandatory payroll saving plans such as those in Australia, Chile or Singapore, where money is automatically deducted from paychecks and deposited in defined saving plans. In addition, countries can have quite different distributions of incomes between wages and profits and can use wage reductions as a preferred way to achieve a result similar to devaluation of the currency.

Capitalist countries that believe in an active role for government can have active, government led or supported strategies, a concept that is quite alien to those who think that completely decentralized decision-making is the sure route to optimal efficiency. For instance, government supported strategies can embark on attempts to accelerate the acquisition, adaptation, and production of new, typically higher technology products instead of remaining specialized in existing products, (e.g., the Taiwanese government successfully invested in semiconductor manufactures starting virtually from scratch).

Common property is key resource in most if not all capitalist systems

While capitalism is usually defined as a system based upon private property and free enterprise, this is a remarkable oversimplification. As already noted, it is based in part upon regulated enterprise and in part upon common access to certain resources, such as air, water, light, and use of land for purposes of transportation. Historically, capitalism was also associated with the abolition of common land for grazing purposes in order to improve efficiencies. The choices in how to deal with common resources can be seen in terms of a hypothetical common, symbolized in the green area of Slide number 4.

When common land is left unfenced or unregulated, the situation is ripe for what is known as "The Tragedy of the Common," i.e., the tragedy that arises when economic actors have unrestricted rights to the use of a common resource such as a pasture.[3] If unregulated, the actors (e.g., the farmers or shepherds) will have a tendency to keep adding more animals to their herds until they cause the overgrazing of the field and damage or even destroy it. Still more obviously, it will be difficult for such a group of actors, if they act as individual competitors, to maintain the fertility of the field let alone improve it, and thus it will be very difficult for them to improve its productivity over time. Thus, the availability of a common resource is a classic case where unregulated competition produces undesirable results.

However, it is also a problem which can be readily solved by putting a fence around the field, adding a gate, and having someone lock and/or guard the gate. Given an enclosed field, the agent in control of the gate can regulate the number of users and/or their frequency of usage, thereby avoiding the over usage that would destroy the usefulness of the field as a source of food. What this means is that the so-called "tragedy of the common" is only a concern for an *unregulated common.* But simple as it might sound to have a fence, a gate, a guard and some rules and regulations that limit usage by the various actors, no regulatory framework can be expected to work unless it has been established by a legitimate political authority that can back enforce its actions by coercive force if need be, unless it is one that starts out with coercive force and without legitimacy.

This simple example illustrates some of the critical forces at the heart of what is needed for effective regulation of any common resource, such as air, water, sunlight or access to a right of way for travel. And solutions might seem simple, but in reality they are not. In Britain, where the idea of enclosing the common has been much studied, the common areas were privatized over several centuries, typically by acts of Parliament, and typically by awarding the land in question to the nearby manor or large landowner. Thus, the Enclosure Acts that were credited with improving productivity through improved methods of farming were redistributing land in favor of the rich while impoverishing most of their neighbors. In addition, these same acts have been credited with creating the pauper class that helped energize the workshops that preceded the Industrial Revolution and then the much larger factories of the latter era.[4] Enclosing the common in a legitimate, effective, and socially "just" or "democratic" way is therefore quite a difficult task for any political authority to undertake.

These developments in Britain illustrate the close connection between the system of economic governance and its political counterpart. The small landowners symbol-

[3] The name comes from a paper by Garrett Hardin, an eminent biologist.
[4] See Karl Polanyi, *The Great Transformation,* Beacon Press.

ized by the small houses in Slide number 4 had no representation in Parliament until late in the 19th century, by which time the Enclosure Movement was long since over. Parliament was dominated by the great landowners even after the Great Reform Bill of 1832, so the landowners could simply vote to grant themselves the right to take the land legally.[5] This illustrates one of the great risks of capitalism; powerful people can use the system to appropriate common resources from their neighbors, all in the name of greater efficiency through privatization. Power passes back and forth between the economic system and the political, and concentrations of power in either can subvert normal processes in the other. However, redistributing the land among the peasantry in the small brown houses is no sure answer either. When tried in a number of countries, for example in Mexico when it broke up its *ejidos,* it was a recipe for creating farming plots that were too small to be viable, and thus it led to declining productivity and poverty.

Market frameworks as a key common asset of capitalism

In my view one of the great common assets of capitalism is hidden right in plain sight. It is the market frameworks that underpin the various markets for factors of production as well as trade in goods and services. These market frameworks are expressed in laws, regulations, and, in many countries, the law books that explain precedents from previous cases. Since these frameworks originate in legislatures they are by definition common property. This is also the case for later supporting regulations and court decisions. And, if a legislature has truly met Abraham Lincoln's notion of governing the people *for* the people and not just *by* the people, then it has created a form of commonwealth as surely as if it had voted to authorize new schools or highways to benefit all, as expressed in Slide number 5.

The state and the firm

Firms have a somewhat different relationship to the state in the U.S. than in many other industrial countries, and this difference is very germane to your inquiry into the off-shoring of activities by U.S. firms. As noted in Slide number 6, in most countries firms are chartered by a single authority speaking for the Nation. In contrast, in the U.S. the Constitution did not give the Federal Government this power to charter firms, for fear that this power might make the central government appear so powerful that the Constitution itself would be rejected during the ratification procedure. This meant that there were initially 13 gates (i.e., the 13 states at the time) to the common of the U.S. market during the colonial and early federal era. This governance structure suited the market of the time; transport costs were so high that, once one was away from navigable water, the U.S. market amounted to something much closer to 13 distinct State markets and, indeed, many smaller markets than to a single, national market. In these circumstances, a state was granting authority to firms to operate in markets that might in reality be a good deal smaller than a state and thus able to be managed by the regulatory power of the state in question. U.S. states typically granted these early charters for public purposes, such as for universities and canals, and, given their local monopoly power in chartering, could accordingly ask for something in return. Since capital was scarce and corporations were rare until the early 19th century, few, if any, issues over firm power arose. The corporation existed as a legal entity because of a grant of power from the state and was at the same time accountable to the state and its chartering standards.

As time passed and transport improved, trading radiuses grew larger, and there were more and more requests for charters to establish a legal vehicle more permanent than a partnership. At much the same time, the concept of limited liability was developed, increasing the value of and demand for charters for incorporation even more. In order to speed up the processing of such requests and reduce the corruption in the legislatures over who would be favored, the states gradually shifted to "general charters" that notably lacked specific, public purposes. This movement to the general charter without specific firm objectives and standards reduced the apparent dependence of the firm on the state. Accordingly, legal doctrine gradually evolved toward seeing the firm as the beneficiary of a free contract with the state and, eventually, as a "free entity" altogether, as though firms and indeed capitalism were born from and existed independent of the state.

What this meant was that by the 1870s, as the railroads linked regional markets into a nationwide system, the Nation had 30–40 gates or states admitting firms to the market. States competed for the funds generated by corporate taxes and thus

[5] For a fascinating and famous account of these events see Karl Polanyi, *The Great Transformation.*

raced to the bottom in issuing charters that granted generous terms to firms. It was a case where unregulated competition was clearly *not* in the public interest. And the clearest example came in 1888 when New Jersey decided to break ranks with the other states and authorized its firms to create holding companies to buy or merge with other (often rival) firms, no matter where these firms had been incorporated and no matter whether such growth would reduce industry competition. As New York and eventually other states followed New Jersey's lead, the gates to the national market or common were opened wide to quasi-monopoly capitalism. The following years were marked by a stampede of mergers and the creation of much larger firms. Indeed, this change in New Jersey law would undermine almost all regulation of firm behavior, facilitating a great change in the structure of U.S. firms and industries, all of it aimed at larger size with the implication of much greater economic power. And though this changed the nature of interstate commerce dramatically, the U.S. Congress had little or no say in the matter as it lacked the constitutional right to intervene in the chartering process.

President Theodore Roosevelt understood this imbalance of power and attempted to correct it by supporting proposals to create a federal right to charter or license firms, as is discussed in the attached excerpt from Chapter 13. However, neither he nor his successor, William Howard Taft, was successful. What this meant was that the U.S. Government had little right to regulate its own market prior to the passage of the 17th Amendment in 1914, an amendment which switched the selection of U.S. Senators away from State legislatures in favor of direct election. This amendment was viewed as essential to establishing more adequate power in Washington to regulate the national market. Thanks to their extraordinary influence in State legislatures, the big firms had been able to ensure the appointment of enough Senators friendly to their interests to dramatically limit the regulatory powers of the Federal Government. Thus, the U.S. market had become much like the unregulated common discussed earlier, except that the agents taking advantage of the situation were firms advised by lawyers and not poor shepherds or goat herds, as suggested in Slide number 7.

Today's global economy is much like the U.S. in the later 19th century

In today's economy, nations and states charter firms to compete in a global common, but no chartering authority exists that wields the political power to impose rules on these global markets. While there are rules for trade, the chartering of financial firms in particular invites a race to the bottom to escape taxes as well as regulations. At the same time, some countries are imposing conditions on foreign firms as a condition for doing business in their countries. This issue is particularly important in the case of a few very large countries, notably China. These countries, with priorities that favor rapid growth, are using national power to partner with U.S. firms on the condition that the latter move some of their activities to China. These countries are behaving much the way New Jersey did in an earlier era, taking advantage of an inadequately regulated common.

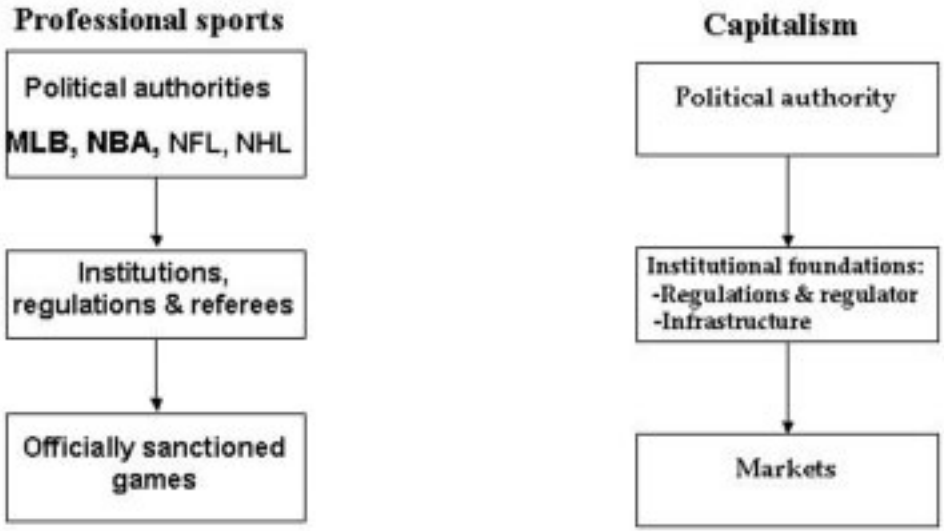
In light of the inadequate regulation of the global markets for capital and technology movements, I suggest that you consider reopening the question of a federal charter or license for U.S. firms as a way to specify certain requirements for behavior. For instance, a federal charter might state that any U.S. firms may choose to work for stakeholder interests if they so choose, a choice that they already have, in fact, but often seem to not be aware of. This would be a weak form of guidance. I think it would be better to consider the establishment of a mandatory standard of stakeholder welfare. In addition to the fact that it would put U.S. firms more nearly in step with some of the major European countries in this respect, I believe it would be a healthy step in its own right, in that it would help limit the steadily increasing inequalities of income in this country. And, as another possible standard, there could be a mandate that any incentive compensation, other than that taking the form of restricted stock that is held for at least five years, would be subject to a very high rate of taxation, so as to more nearly align managerial incentives with those of shareholders.

Incentive compensation systems should have a downside risk as well as upside potential, and the only way to achieve this will be by uniform regulation; otherwise, any firms that did so voluntarily would risk a loss of key employees. The incentives in our market framework have become very problematic in encouraging CEOs to take risks in circumstances where they are not subject to comparable down side consequences if they fail. The costs of failure are borne by shareholders, lower level employees and, on occasion, by taxpayers. Our market frameworks, like the pastoral common of old, need regulatory standards to reduce the likelihood of opportunistic behavior that inflicts losses on other users of the same common.

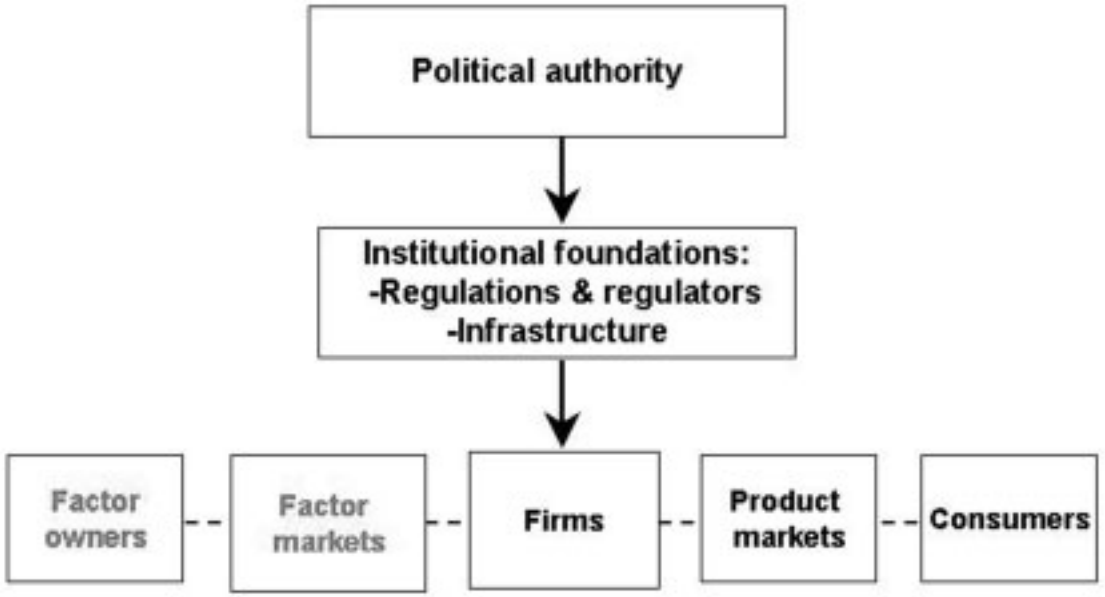
Thank you.

Capitalism is
not simply property rights, private enterprise and markets, but
a system of governance

Organized competition is governed as three level systems



The factor markets embody economic strategies



Capitalism relies upon common resources as well as private property
THE COMMON
© Bruce Scott, Capitalism, Democracy, and Development manuscript, May 2008.

A common resource is hiding in plain sight…

- The market frameworks for each sector are critical common resources of a society
- Market frameworks are created by legislatures and enforced by regulatory authorities
- If the market frameworks include the appropriate costs and benefits, it is because the political markets have been animated *for* the people (and not just *by* the people)

The state and the firm

Nations/states confer corporate charters with responsibilities as well as rights

Early US charters were conferred by 13 states, and typically granted specific powers to serve public purposes, e.g. for universities, bridges, canals

In the 1830s-50s the states changed to general purpose charters, adding limited liability while reducing apparent connection to the state as "grantor"

By the 1860s, the 30-40 states raced to the bottom to grant charter rights and collect incorporation fees while requiring almost no responsibilities of firms.

With population growth and the railroads creating a national market, the state-based US chartering system effectively allowed firms to operate in an "unregulated" common.

The US Constitution created an incomplete system for regulating US capitalism

•The federal government was granted exclusive rights to regulate interstate commerce (the common) but it had no power to charter firms

•When New Jersey authorized holding companies in 1888, it was followed by other states (e.g. New York); this permitted a change in the structure of firms and industries for the entire US economy, without a vote by Congress

•Federal power to regulate interstate commerce was very limited due to the state-based chartering system and also to the fact that business interests dominated the US Senate until the 17th Amendment (1914). "TR" saw the conundrum:

"Experience has shown conclusively that it is useless to try to get any adequate regulation and supervision of these great corporations by State action. Such regulation and supervision can only be effectively exercised by a sovereign whose jurisdiction is coextensive with the field of work of the corporations—that is, by the National Government." *(Theodore Roosevelt, 1905)*

Today's global economy has regulatory frameworks much like the US in the 19th century

- (Mostly) national governments charter firms
- Regulation of world markets is incomplete
- Capital is much better able to evade regulation than labor
- Foreign governments are "partnering" with US firms to induce them to move operations offshore, in a race to grow

Implications for Policy

(1) Re-open consideration of a federal charter to operate in the US

- Mandate that the firm may be or must be run in the long term interests of the firm and its stakeholders

(2) Consider sponsorship of a global license for doing international business, to be administered by a multilateral agency

- Mandate minimum standards of behavior for firms

Bruce R. Scott
Excerpts from *Chapter 2 Capitalism, Democracy, & Development* draft, May 2008.

Capitalism as a System of Governance

Introduction

Capitalism, as I use the term, is an indirect system of governance for economic relationships. These economic relationships are mediated in the first instance through markets, both the product markets (for goods and services) and the factor markets (for land, labor, technologies and capital). However, they are also indirectly mediated by a political authority, usually a government, which establishes an institutional framework to underpin and regulate these markets; economic actors are allowed to exercise power to freely transact their business with one another so long as they obey the established laws and regulations. Capitalism in this way contrasts with other forms of governance based upon direct hierarchical control by a political authority, such as systems of centralized planning and control and/or state ownership of property.

As an indirect form of governance, capitalism creates a commercial "common" where many actors have rights to compete for access to a set of resources and also for the ability to sell these resources in a set of markets, all in a context where other actors have similar rights and responsibilities. Historically, the traditional common was a pasture where many farmers or shepherds could share the right to graze their animals and where there was little by way of a formal structure of governance. Absent a political authority to ensure such governance, it was difficult to get the economic actors to limit their usage of the common and also difficult to get them to accept their fair share of the responsibilities for its maintenance let alone its improvement. Thus, an inadequately regulated agricultural common could be abused by some of the actors, for example by allowing their animals to over-graze and damage the land to the disadvantage of all of the economic actors, while lack of a system for improvement could limit any gains in productivity from this resource.

The commercial common had a different history, with its origins in a governance system for a much less tangible resource, the market frameworks themselves. Formalization of rules was key to the development of this common resource, which might initially entail little more than providing a legitimate source of authority to enforce a set of standards for the trade of goods and services, as already agreed among the economic actors themselves. Over time, this commercial common gradually and naturally took on a physical as well as an intangible reality as it became important to have roads for travel, designated places for trade, physical protection of the economic actors from thieves, perhaps including unscrupulous tax collectors, and a means for adjudicating disputes.[1] However, this commercial common became something quite different when it was extended from the product markets to the factor markets, i.e., the markets for land, labor, technologies and capital. Typically the deepening of the commercial common to include the factor markets required dramatic changes in power relationships, for example to free serfs from their feudal obligations and allow them to instead work for wages. The

[1] Garrett Hardin, an eminent biologist, wrote a famous paper on The Tragedy of the Commons, only to recognize later that the tragedy came not from the concept of the common per se but from the lack of effective regulation in how it was used, maintained, and developed through time. Cf. Hardin, The Tragedy of the Common.

same was true for freeing land from feudal contractual obligations and for granting permission to amass power through legal vehicles such as firms. Moreover, the deepening of the commercial commons to include the factor markets often required violent change through conquest or revolution. As a result, it did not happen gradually the world over, but rather took place in some locations centuries before others, a situation that I explore in Chapter 5. The experiences of North America and South America in the period 1500-1800 provide a particular contrast, a situation that I explore in Chapters 6 and 7.

Prior to the advent of long distance trade, circa 1500, people all over the world were able to manage their local physical commons because they were small enough that the economic actors could see the damage that resulted from over-hunting or over-grazing, govern themselves accordingly, and inevitably suffer the consequences because trade was so limited. Opening relatively isolated communities and markets to trade and specialization led to the destruction of many such commons, as well as to a loss of social cohesion in those smaller, more rustic communities. A similar problem remains today, albeit on a much larger scale. Successful globalization depends upon successful regulation of a global common, including successful regulation of atmospheric pollutants and the harvesting of marine life. While excessive regulation has stifled many economies for long periods, inadequate regulation is also a threat to effective decentralized decision-making throughout the global common. Abuse of the common is an ever present temptation that goes with economic freedom. Effective use of a commercial common, as well as its effective protection from abuse, depends upon the maintenance of an effective system of economic governance and, for all practical purposes, today that means governance through a capitalist system.

To say that the economic actors who use a commercial common must obey the laws and rules established by government implies that capitalism is a three level system: the markets that constitute level one are underpinned by institutions, including laws and regulations, that constitute level two, and these laws, regulations and other institutions are created, legitimated, enforced and periodically modernized by a political authority that constitutes level three. Voluntary trade by autonomous actors in product markets is an emblematic feature of capitalism, but these seemingly voluntary and private actions exist in one part of one level of a three level system. Unless one has free mobility in the markets for land, labor and capital, and the other two levels are incorporated in the definition of capitalism, any analysis of how it works, and especially of how it develops through time will be grossly oversimplified and inevitably distorted as well.

Capitalism needs to be distinguished from two other contemporary systems of governance for economic relationships and also from two other systems that have largely disappeared. One contemporary alternative is based upon direct control of human and other resources through a hierarchy that is backed by the coercive powers of a state, as in the former Soviet Union. The second is a largely if not completely informal economic system, where self-sufficiency, perhaps among family units, is still practiced and there is only a modest degree of specialization or trade. In such cases the rules for property ownership and trade are informal, and there is no recognized coercive authority to enforce them. Historically this latter form of organization characterized many indigenous peoples, and it still has scattered exemplars today. Two other forms of organization have become largely or completely

obsolete, at least at the societal level, i.e., slavery and feudalism. Slavery has a long history and was important as recently as the mid-nineteenth century, and it will figure in our story of the early development of the western hemisphere. Feudalism, though largely extinct, has had a much more important role in economic history, and indeed capitalism emerged from centuries of feudalism in Europe in the period 1400-1800. There is much to be learned from how and why capitalism emerged in Europe and North America long before it emerged in Latin America.

This chapter builds from the definition of capitalism set out in the opening paragraph above, and elaborated upon in the next section, to explain how and why government shapes markets as well as regulating the commerce with them. Once I have established my own concept of capitalism, I will compare it with that of Milton Friedman because Friedman's concept has been very influential in mainstream economics as well as in policy making. The differences between his definition and mine are fundamental to the narrative of this book. As a way to familiarize the reader with my three level framework, I will compare it with its counterpart in sports. Whereas informal sports are analogous to market definitions based upon voluntary bilateral transactions, organized sports can only be understood in terms of a three level framework where the rules and other institutions emanate from a political authority that has been endowed with coercive power. Following this comparison I will describe each of the three levels separately and briefly illustrate their respective dynamics.

The main thrust of this chapter is devoted to how capitalism works as a three level system in which the visible hand of government plays a crucial role in defining and periodically reshaping property rights and permissible behavior in market frameworks. I will discuss each level in turn. Then, with the parts and relationships of the system identified, I will switch to looking at this system from the point of view of the principal economic actor, the firm. With this change of perspective, we will see that firms as well as governments have a coordinating role in a capitalist system. They play such a role when they develop products, produce them and plan their distribution, whether on a local or global scale. As a result, capitalism has three essential coordinating mechanisms and not that of the familiar invisible hand. Furthermore, two of these three coordinating mechanisms will be seen to involve human agency; only the familiar invisible hand of the pricing mechanism operates automatically without explicit, planned human agency. This makes the study of capitalism a subject of much broader scope and more varied dynamics than the study of supply and demand in markets.

Capitalism defined

Capitalism, as I use the term, is an indirect system of governance for formalized economic relations in a geographic area where a political authority has empowered economic actors, usually in the private sector, to own and control the use of resources for private gain subject to a set of laws and regulations. While the economic actors are allowed to own various kinds of resources they are not allowed to own certain common resources such as the sunlight, air and large bodies of water, or the market frameworks. The institutions that underlie a capitalist economy, such as laws and regulation, infrastructure and certain public services, typically belong to society as a whole, and the rules regulating them are backed by the coercive powers of a state, a condition often not found supporting the rules of

the ancient common. Thus, within the rules of a capitalist framework, workers are free to change jobs in search for higher wages, capital is free to move in search a higher return, and both labor and capital are free to enter and exit from various lines of business. It is an indirect system of governance in that it recognizes that a decentralized system of decision making can spontaneously facilitate an improved and perhaps optimal use of resources for society as a whole through the operation of markets, as Adam Smith recognized long ago. Formal markets facilitate the aggregation and matching of supply and demand; the price mechanism serves to balance these opposing forces; the profit motive serves to allocate opportunities and resources among competing suppliers; and self interest serves to allocate human resources across various occupations as well between work and leisure time.

Government's primary mode of intervention in a capitalist system is indirect, through formulation and enforcement of the laws and regulations that guide behavior as well as through provision of certain common resources. Nevertheless, the actions of government inevitably imply a strategic tilt to the various market frameworks; they tilt toward capital or labor, investors or creditors, producers or consumers, and so on. The market frameworks are thus shaped by government, and that shaping can be based upon quite different policy priorities, from protecting the status quo to the promotion of growth and development. These same market frameworks can accept more or less risk as well as more or less tilting for or against particular classes of economic actors (producers or consumers, etc.). Governments specify the responsibilities of the various participants in these transactions, e.g., for the safety and serviceability of the products and the conditions under which they are produced and distributed.

Thus, the actions of government, whether indirect or direct, inevitably imply a strategy, though this strategy is often largely implicit rather than overt. In addition, this strategy is typically created gradually over time rather than as a grand plan, and typically involves the inputs of many people with competing ideas.

What exactly are market frameworks? Market frameworks define what property is and what rights belong to its owners; in addition they define permissible behavior as the parties interact with one another, such as in prohibiting price fixing but allowing discount pricing. In addition, market frameworks provide certain elements of the physical and social infrastructure that may be used in common by economic actors as foundations for their activities, whether in production or trade. For example, if one is considering bidding for an empty piece of land, the bid price will be influenced by the market framework as well as by the bids of other actors. The market framework spells out what property rights go with the piece of land. Can one build upon it? Can one only build a residential structure, or would a commercial or industrial structure be allowed? Can one build right to the lot line, or is there a minimum setback? Can one build to any height, with any mass in terms of cubic feet, with any architectural style? Are subsurface mineral rights included? The applicable property rights are established by various political authorities and, in the case of the US, are often established by local zoning boards. In Europe many of these same rights are established and administered by provincial or even national governments. These rights affect the potential value of the property for all bidders, and the bidding

takes place within the framework that is so established. Furthermore, government reserves the right to change the frameworks from time to time as societal priorities change.

Capitalism relies upon government to establish the laws and regulations so that they take account of all appropriate societal costs and benefits. Some costs are difficult to include in market frameworks, as, for example, the costs of pollution of the air or water. Where such costs have not been included, typically because powerful interests resist their inclusion, they are said to be externalities and a type of market failure. This most basic kind of market failure cannot normally be addressed by economic actors alone and will not normally be cured by market forces; instead, it is best understood as a political failure. In addition, however, there are many situations where factor markets arrive at prices that may reflect private bargaining power and even coercive power, rather than mutually beneficial transactions arrived at voluntarily. Wages for low-skilled labor in a period of high employment and immigration would be an example. This same labor market might work quite differently if there were higher employment, fewer immigrants and/or greater protection for collective bargaining by labor. In such circumstances, one can hardly claim that the pricing mechanism yields outcomes that are optimal for society. Also in such circumstances, supply and demand reflect power relationships and, again, political considerations. When organized economics narrows its focus to the analysis of supply and demand within existing market frameworks, it is implicitly assuming that externalities (political and well as physical) are more the exception than the rule, an assumption that tends to bypass political power relationships in the markets while crediting government with remarkable powers of analysis and concern for public welfare that strain credulity.

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Organized sports as an analog to capitalism

Organized sports provide a useful analogy to capitalism because they are much simpler systems. Milton Friedman has used this analogy; he compares the "day-to-day activities of people" to the "actions of the participants in a game when they are playing it" and likens the "general customary and legal framework" within which these activities take place to "the rules of the game they play."[2] However, his model contains what I believe to be some significant oversights, including the omission of any specification of a political process for its governance or any notice of cumulative advantage in capitalism. Instead, he emphasizes the voluntary nature of submission to rules and conditions in both sports and society. While asserting the need for agreement to the rules or conditions, as well as the need for a system of arbitration (e.g., the umpire or government), Friedman ascribes the source of these rules and conditions to the "unintended outcome of custom, accepted unthinkingly" and claims that "no set of rules can prevail unless most participants most of the time conform to them without external sanctions."[3]

[2] Milton Friedman, *Capitalism and Freedom*, 40th anniversary edition (Chicago: University of Chicago Press, 1962), 25.
[3] Friedman, 25.

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Friedman concludes his analogy: "These then are the basic roles of government in a free society: to provide a means whereby we can modify the rules, to mediate differences among us on the meaning of the rules, and to enforce compliance with the rules on the part of those few who would otherwise not play the game."[4] I agree with Friedman's list as far as it goes, but he fails to tell us much of anything about what shape the market frameworks take, which interests they might favor, where the rules come from or how they are modernized. To say that they are the unintended outcomes of custom makes it sound as though the outcomes are almost as obvious as natural laws where "most participants most of the time conform." It is a return to the notion that government has discharged its responsibilities with "easy taxes and a tolerable administration of justice," a position that dismisses government as too unimportant to merit attention. It is a position that attracts the loyalty of many who like its ideological implications and are not even aware of the oversights involved. Unfortunately, it helps sustain those who wish to use economic reasoning to help refashion the law and, in my view, is politics masquerading as economics.

Economic actors, if left "free" to exercise their powers in a so-called free enterprise context, can corrupt government, thereby suborning democracy in favor of oligarchy. Government is not alone in its capacity to abuse power. Given a chance, the private sector will abuse its powers so that markets work for the few and not the many. Government must restrain and regulate those with private power and fulfill its responsibilities to protect the citizenry, i.e., to provide tolerable law enforcement. In addition, capitalism requires that government play a positive role in providing the public goods for which it is responsible, goods without which most people cannot expect to take advantage of the opportunities that capitalism can provide.

From this enumeration of the essential roles of government, it should be clear that the political realm cannot be cleanly separated from the economic. Anyone who defines capitalism or analyzes capitalist development must take account of the way in which power earned in the economy can be used to influence political decisions. In this respect capitalism is quite distinct from organized sports, a point that Friedman missed. Indeed, the misuse of the analogy hides some of the weaknesses of capitalism. In organized sports the teams are normally of equal size, much as in the model of atomistic competition. However, in capitalism one firm may be ten times, a hundred times, or a thousand the size of another. Capitalism can support oligarchy, even a corrupt oligarchy, and in such a case it is not the guarantor of the freedoms that Friedman claims for it. Those claims cannot be expected to be justified unless civil society is alert to the unequal distribution of power within the system, particularly to the distribution of political power, and actively demands reform. Laws do not make themselves nor enforce themselves. Unless there is demand for enforcement it will not normally happen. On all of this Friedman is silent. While we can begin a process of examining power relationships in a capitalist economy immediately, it will require the remainder of this chapter and the next two in order to establish the scope and interplay of the linkages between economic and political power.

[4] Friedman, 25.

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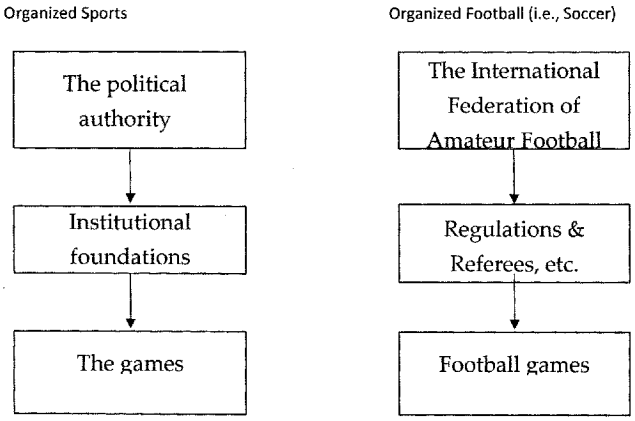
All organized sports can be understood as three-level systems, as suggested in Figure 2.2. The first level is the game itself, in which athletes compete with one another, whether as individuals or as teams. This competition is usually the focus of audience attention; we are concerned to see who wins or loses as well as how the game is played. Organized sports are not played in back alleys or out in the tall weeds, nor at random times among random assortments of athletes. Rather, the actual competition usually unfolds in carefully marked-out areas, at specific times, under the supervision of a set of referees. The use of an explicit setting and set of rules for sports parallels capitalism's nascent beginnings in the late middle ages, when it was confined to specifically designated market locations and market days and was often carried out according to a prescribed set of rules, usually under the direct supervision of duly chartered guilds of registered tradesmen. Unorganized sports are like the informal economy in Figure 2.1.

The infrastructure that guides the first-level game, then, is created and maintained by the administrative and regulatory officials who comprise the second level. More specifically, these agents demarcate the field, specify the rules of play and the scoring system, and monitor the play. These agents organize and legitimate the competition and ensure that it is carried out on a level playing field, with no unfair advantages permitted.

Figure 2.2. Organized sports operate on three levels



But how do these institutional foundations arise and achieve legitimacy? In organized sports—as in capitalism—a third level is required to complete the system. It is comprised of a political authority with the power to decide the rules, such as who is eligible to compete, the time and location of the games, and the technologies that may be used. In professional sports the political authority may also

have the power to set the terms and conditions for the distribution of certain revenues among participating teams, a power that can be exercised to limit disparities in incomes by team, thus curtailing the relative power of one or a few teams to dominate the sport year after year.[5]

The Olympics are organized as individual sports under the auspices of an umbrella organization, a slight variant from the diagram above. International football is organized in the usual pattern, where the International Federation of Amateur Football, or FIFA as it is known in France, establishes the rules and hires the judges to monitor competition. US professional football is organized under the auspices of the National Football League (NFL) in a similar structure.

In sports, as indeed in capitalism, political authorities play two distinct roles: one administrative, in maintaining the existing system of playing fields and enforcing the existing rules, and the second entrepreneurial, in mobilizing power to win the needed votes in the legislature in order to admit new teams, change the locations or timing of competition, change the rules and regulations, and change the distribution of revenues. Every time a political authority wishes to enact change, its leaders must mobilize enough power to overcome the forces that wish to protect the status quo. In organized sports the political leaders may have gained their position of power through purchasing a league franchise to own a professional team. While they typically operate through political bodies (e.g., an executive and a legislature), the members of the league's legislature own their seats and typically are not accountable to an independent electorate. In addition, the entrepreneurial aspect of teams exercising political power in organized sports is very different from that of firms exercising political power in democratic capitalism, insofar as the political authorities for most organized sports operate under a grant of immunity from antitrust laws, which allows them to govern their league much like a state. Teams in a sports league can sit together as a legislature to revise the rules of play, admit a new team to the league, and even legislate a split of revenues if they wish (e.g., television revenues). Firms can mobilize lobbying power through trade associations but are not usually permitted to control entry to their industry or to split revenues let alone rig prices.

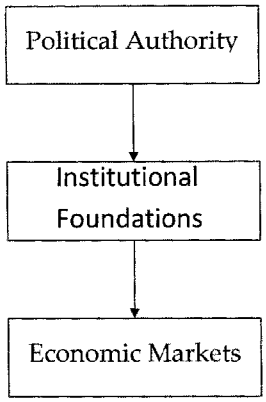
Capitalism, too, can be viewed as a three-level system, as suggested in Figure 2.3. On the first level consisting of markets, firms compete to secure their labor and capital as well as to serve their customers. And, as with sports, individuals and firms mobilize and apply energy to achieve their goals, some following distinctive strategies and others playing it safe with a "me too" strategy. The second level consists of the basic institutional foundations, including physical and social infrastructure. Physical infrastructure includes, among other things, transportation and communications; social infrastructure includes the educational, public health, and legal systems. In addition, the second level contains the agents of the state who enforce the rules and regulations, including specialized regulators who oversee behavior in certain industries, such as those that deal with food and drugs or transportation as well as those who protect societal resources such as the physical environment or safety in the workplace. The

[5] In the United States, the National Football League is widely recognized as the most socialistic of the organized sports because the league authorities have the power to distribute their television revenues approximately equally among teams despite the difference in the markets which they directly serve.

third level consists of a political authority—typically one with specialized functions such as executive, legislative, and judicial branches. In turn, a set of political institutions connects the political authority to the political markets (i.e., elections, which may be more or less democratic) and eventually to civil society, to which the political authority is ultimately accountable. I will connect the economic and political systems in greater detail in the next chapter.

Thus far I have emphasized that organized sports and capitalism are similar systems that operate on three levels. But while there are many similarities between organized sports and capitalism, there are some crucial differences, most of which stem from fundamental differences in the respective purposes of the two systems. The purpose of organized sports is to facilitate periodic competition among athletes, whether as individuals or as teams, both to encourage and recognize athletic excellence and to provide entertainment for the public. To this end, each sporting contest starts anew with a "blank slate" or scoreboard, teams are of equal size, and the advantages gained by a team during a game or a season are forfeited at the end of a season or year. In addition, and crucially, the entry of new teams is controlled by a system of franchises that may only be granted by a sporting authority that acts under an antitrust exemption and thus has sovereignty over its sporting league, like a state.

Figure 2.3. Capitalism as a three level system



Capitalism, in its various forms, facilitates the productive use of societal resources in order to meet consumer needs in the short run and raise the standard of living through time. As a result, its regulatory frameworks give priority to promoting productivity rather than to the fine points of equalizing competitive resources on a given day or during a given season. At the same time, with rare

exceptions, capitalism is regulated after the fact and not in real time the way organized sports are. The regulators do not stop the play to assess a foul, nor do they halt the competition to examine a controversial event via "instant replay." The economy moves on, and disputes are settled after the fact, in court if need be.

Since economies of scale enhance productivity, it follows that capitalism generally permits the accumulation of advantages, subject to certain exceptions and certain limits on acceptable behavior. It also follows that capitalism permits "teams"—i.e., firms—of radically different sizes to enter and exit industries without the approval of other participants. Likewise, it permits the entry of new competitors with new technologies that may give them an advantage over all other competitors. As a result, capitalism permits and encourages multifaceted competition among firms of different sizes using different resources on more than a single playing field (or industry) at a time.

The concept of the level playing field is used almost as much in capitalism as in sports, but capitalist competition, though regulated, is not designed to unfold between teams that are equal, nor circumstances that must be "level." Advantages, such as a playing field tilted in one's favor, become possible sources of additional—and potentially cumulative—advantages. In the terms of our analogy, the "scoreboard" of capitalist competition is never wiped clean; "points" or firm advantages carry over from one competition to the next. And since capitalism is designed to promote productivity, it can be expected to promote inequalities of income and wealth, and first movers in a technology may keep their advantages for decades. Capitalist competition is for keeps, not for sport.

As referenced in the introduction to this chapter, prices coordinate decisions in terms of supply and demand for all manner of goods and services. In addition, they coordinate supply and demand in factor markets such as those for labor, capital, technology, and, most recently, knowledge.[6] This suggests that we need a more detailed model of capitalism that recognizes different types of markets and the roles of various economic actors. And it also suggests that we need a model that adds other elements to each of the levels in the system.

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Market frameworks differ from one country to another

Differences in the market frameworks of product markets can be illustrated by the relative prices of gasoline and pharmaceuticals between Europe and the United States in Figure 2.8. Differences in gasoline prices, as represented in stylized form by Figure 2.8, are accounted for largely by differences in sales taxes among various countries. Thus, the United States has a much lower tax on gasoline than its European counterparts.

[6] See David Warsh, *Knowledge and the Wealth of Nations: A Story of Economic Discovery* (New York: W. W. Norton, 2006) on the new trend of regarding productive factors as people things and ideas.

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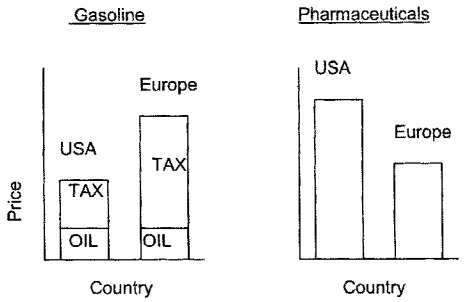
The Europeans have used the gasoline tax as a source of general revenues, while the US has from the beginning earmarked gasoline taxes primarily for highway construction and maintenance. As a byproduct of these differences, the Europeans have relied on gasoline prices to induce the development of more efficient automobiles, while the US has attempted to reduce gasoline consumption by establishing regulatory standards of fuel economy for various classes of cars and trucks. Thus, when it comes to promoting efficiency in the use of gasoline, the Europeans have taken a more market-oriented approach than the United States.

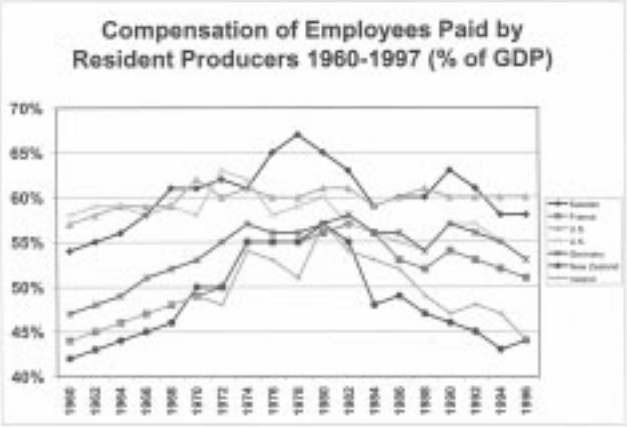
Figure 2.8. Product market frameworks differ from one country to another



When it comes to pharmaceuticals, the story is roughly the reverse. The facts are stark: the US, virtually alone among developed countries, allows market pricing for drugs while most other developed countries have price controls. This difference in pricing policies by country has led many European pharmaceutical firms to shift important parts of their research activities to the United States, where they have a much better opportunity to recover their research investments. In a sense, then, US consumers are footing much of the bill for pharmaceutical research for the rest of the world. At the same time, the US has developed a domestic health care system where much of the cost is borne by employers. European competitors have an advantage in that their firms do not have comparable health care costs because the latter are mostly borne by their respective governments.

Market frameworks can also affect relative factor costs. As shown in Figure 2.9, labor's share of national income (GDP) varies quite significantly across a sample of industrial countries, with Sweden at the very top in the mid-1970s and Ireland and New Zealand falling toward the bottom as the 1990s progressed. Labor's share of income is almost the reverse of that accruing to capital. Sweden's high share for labor meant that it had a low share for capital, i.e., low profitability for its firms. This made investment in Sweden relatively unattractive in the 1970s and 1980s, and when Sweden opened its capital market as a precondition for joining the European Monetary System at the end of the 1980s, it suffered capital flight and a financial crisis.

Figure 2.9. Employee compensation as a share of GDP can be a strategic variable



At the other extreme, Ireland and New Zealand reduced their wage costs as a share of GDP by similar amounts in the 1980s as a matter of policy in both cases, but by very different means, a circumstance that I will return to in Chapter 12. A lower wage share in GDP typically translates into a higher share for profits, savings, and investment, and thus a higher growth trajectory. Note, however, that the peak period for wages as a share of income appears to have been in about 1980. Since then, globalization appears to be driving wages down as a share of income, a point to which I will return in Chapter 14.

Not all deviations from the mythical level playing field are necessarily for the benefit of special interests. Deviations may be introduced because they give a positive "tilt" to the playing field from a society's point of view. For example, some countries, when they were relatively poor and focused on generating economic growth, prohibited the formation of unions and the practice of collective bargaining for decades as a way to promote the profitability of firms and thus more investment and growth. Britain and the United States did so for much of the 19th century. In contrast, the Netherlands and Ireland, both of which are highly unionized, used a national bargaining exercise to achieve pay pauses in the 1980s, contributing to a sharp drop in wages as a share of national income and a corresponding rise in profits. These tilts to countries' respective market frameworks, though very different in terms of the means employed, all helped boost corporate profits and thus the incentives to invest in the respective countries. I will return to this example later in the chapter. At this point, I simply wish to note that market frameworks can be tilted for various reasons, some public and others private, as suggested by the top-down view of a European-style football field in Figure 2.10.

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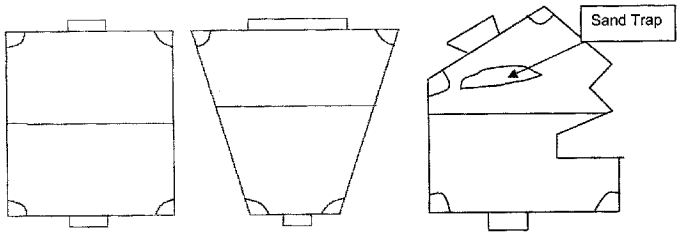
Figure 2.10. Alternative Playing Fields: Level and Tilted



The notion of a level playing field is a much-used sporting metaphor, and for good reason. The purpose of a sport is to have a fair contest among teams that are supposed to have relatively equal chances. Capitalism, on the other hand, is intended as a way to release human energy while channeling it so as to raise productivity. In this latter context a field or market can be "tilted" in a number of ways for public policy reasons, and this tilt can give an advantage to some firms or industries over others. Whereas a normal football (soccer) field is rectangular, with the centerline in the middle, it could easily be modified to favor the team at the south end by making the field—and the width of the goal—smaller at that end and thus easier to defend. In addition, the midfield line could be moved to the north side, making it easier for the south team to score on the north. Any of these changes would be obvious distortions in a sporting contest and, arguably, pointless because the teams could be expected to switch ends during the games. Such modifications can, however, be introduced and maintained in market frameworks in order to favor particular interests for a specified period or even indefinitely. For example, the south end of the field could be given to debtors versus creditors, producers versus consumers, or capital versus labor, depending upon the purpose of the intervention. This tilt might result from lobbying behind closed doors where one interest group wins out over others, using its economic power for private advantage. I have added a field with a "sand trap," borrowed from a golf course, to symbolize distortions introduced to favor private as opposed to public interests. Obviously there can be mixed cases and cases in which the proponents of private gains try to masquerade as public-spirited citizens.

The cumulative nature of the gains in a capitalist system can easily tempt firms to exert considerable effort to achieve, retain, and perhaps even enlarge their special advantages in market frameworks, even as they claim to be engaged in the constant search for a level playing field. In

addition, high incentive compensation can be expected to increase the temptation for and ability of firms to use their economic power to lobby legislators and regulators for special advantages. Thus, the first two levels in the capitalist system are inseparably interrelated. And when we add level three, we will see that it provides the avenue through which economic power gained through competition in level one can be used to secure regulatory advantages at level two. A tilted playing field alters the market frameworks in which decentralized decision-making takes place, whether or not these changes are congruent with the public good.

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The Transformation of U.S. Capitalism and Democracy: 1830-1930

Introduction

In the course of the 19th century, U.S. leaders developed the institutions of their capitalism and their democracy in a rush to exploit the unparalleled opportunities afforded by their rich and lightly inhabited continent. As this happened they confronted two imbalances of power, one economic and the other political. The economic imbalance was that the new firms spawned by the Industrial Revolution, the very engines of economic growth and a rising standard of living, embodied a form of economic power based on the new technologies of the industrial revolution so that absolutely dwarfed the older firms based upon much simpler technologies, smaller scale, and atomistic competition. Were the new firms a natural outgrowth of capitalism, a form of innovation that should be encouraged as natural and perhaps essential, or were they instead a rationale for excessive size and in need of control? If the latter, what theory was to guide the regulators? The political issue was that the rise in corporate power was due in no small measure to a structural weak point in the Constitution which granted full authority to the federal government to regulate interstate commerce without providing the appropriate executive powers or legislative accountability to the public that was needed to fulfill this mandate. If reform was needed, was it with respect to the governance of the firms, the regulatory powers of the federal executive branch, or the absence of a federal charter of incorporation? And, in any event, could the accountability of the federal government be achieved without making the Senate more accountable to voters?

The State Governments: Racing to the Bottom

During the late 19th century, firms worked to coordinate and consolidate their power across the U.S. and its national market. Facilitating this process was the state of New Jersey and its legalization of the holding company in 1888. The concept of the holding company was essentially intended to justify buying the stock of other companies in order to exert significant owner influence over them or at least share in their profits. In fact, according to historian Harland Prechel, it only "emerged because it was a legal means to pursue industrial consolidation strategies."[1] Previously, a firm could only exercise its corporate privileges within the state in which it was incorporated; purchasing rival firms incorporated within other states was prohibited by the laws of those other states. Until the case of New Jersey no state legislature had legally sanctioned the acquisition of corporations across state lines, generally viewing the strategy as a dangerous means of curbing competition and consolidating corporate power. Under pressure to finance its ever-increasing budget deficit, the New Jersey legislature overlooked such arguments and legalized the holding company for firms opting to incorporate there.[2] Law professor Morton Horwitz notes that business interests may have played a role in prompting this move; corporate lawyers such as William Nelson Cromwell directly helped state legislators with the drafting of the law

[1] Prechel, Harland. *Big Business and the State: Historical Transitions and Corporate Transformation, 1880s-1990s.* (Albany: State University of New York Press, 2000 78

[2] Stoke, Harold W. "Economic Influences Upon the Corporation Laws of New Jersey." *The Journal of Political Economy*. Vol. 38, No. 5. (Oct., 1930), pp. 551-579.--571

during 1889-1890.[3] From the state's point of view, the initiative was immediately successful: "Firms rushed to New Jersey; the state was able to avoid income taxes because the revenues from the incorporation business were so great."[4] In fact, the inflow of new firms and new capital was so immense that according to political economist Harold W. Stoke, by 1902 "the entire state debt, which had been one of the motives for this wholesale chartering business, had been wiped out."[5]

Beyond fixing the state's budget deficit, the New Jersey statute carried far-reaching implications. As Stoke observes, New Jersey imposed little regulation upon the new holding companies; they could consolidate companies and exercise economic influence almost free from government oversight.[6] Other states objected to such liberal legislation and the concentration of power that it encouraged. Yet as Stoke points out, "while most of the states strongly condemned the attitude of New Jersey toward the corporations, it was to be expected that some of them should grow envious of her large income, and should undertake to duplicate her program."[7] States were racing to the bottom once again, just as with the adoption of more flexible charters decades earlier. Over the next decade or so, large corporations and their capital would eventually migrate to New York and other states that followed New Jersey's opportunistic lead.

The Federal Government: Regulating the Common via the Federal Chartering of Corporations

Regulation of business through establishing and enforcing rules of conduct proved to be extremely frustrating because federal statutes had to be weakly worded in order to pass through Congress, and especially the Senate, as US Senators were chosen by state legislatures and the latter were heavily influenced by business interests. Reformers thus turned to another approach. As early as 1900 Congress began to consider the merits of the federal chartering of firms. Between 1901 and 1907 six separate chartering bills were submitted[8] and by 1914, nearly two dozen such measures had been proposed; yet all ultimately failed to get through both houses of Congress.[9] At the same time, leaders of the executive branch also became interested in curbing corporate power through the federal issuance of charters. President Theodore Roosevelt advocated such a measure in his run for Vice-President, and later, as President, spoke extensively on the issue. In a 1902 speech in Rhode Island he declared, "I do not believe that you can get any action by any State...I do not believe it practicable to get action by all the States that will give us satisfactory control of the trade of big corporations."[10] In pursuit of this

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[3] Horwitz, Morton. *The Transformation of American Law: 1870-1960: The Crisis of Legal Orthodoxy*. (Oxford: Oxford University Press, 1992). Page 83
[4] Perrow, Charles. *Organizing America: Wealth, Power, & the Origins of Corporate Capitalism*. (Princeton: Princeton University Press, 2002) Page 211
[5] Stoke, 575
[6] Stoke, 570.
[7] Stoke, 575.
[8] Davis, Theodore H., Jr. "Corporate Privileges for the Public Benefit: The Progressive Federal Incorporation Movement and the Modern Regulatory State." *Virginia Law Review*, Vol. 77, No. 3. (April 1991), pp. 603-630. Page 623.
[9] Urofsky, Melvin I. "Proposed Federal Incorporation in the Progressive Era." *The American Journal of Legal History*, Vol. 26, No. 2. (Apr., 1982), pp. 160-183. 176.
[10] Urofsky, 169.

ultimate goal, President Roosevelt established the Bureau of Corporations within the Department of Commerce in 1903, intending to utilize "publicity as an aid in bringing about executive control of the trusts."[11] James R. Garfield, son of former President Garfield, initially headed the Bureau of Corporations as he shared Roosevelt's desire to curb corporate corruption. Like Roosevelt, Garfield believed that "a single state cannot control the great interstate corporations. The nation is the only sovereignty that can control them. The nation is the only government big enough and strong enough to cope with the modern-day industrial combination."[12]

As early as 1904, Roosevelt and Garfield had so popularized the issue of federal incorporation that "the legal and popular press carried literally dozens of articles on the subject, with the vast majority of writers urging federal incorporation as the only practicable method of controlling the trusts."[13] President Taft continued the executive's call for federal incorporation, speaking to Congress on the topic in 1910: "No other method can be suggested which offers federal protection on the one hand, and close federal supervision on the other of these great organizations that are in fact federal because they are as wide as the country and are entirely unlimited in their business by state lines."[14] That same year, Taft endorsed a bill proposed by Attorney General George W. Wickersham advocating federal incorporation. The bill placed strict requirements upon firms; specifically, it "forbade a federal corporation from purchasing, acquiring or holding stock in another company, nor could it engage in banking. Strict standards of financial accounting and publicity were required, with annual reports filed with the Bureau of Corporations. Any extraordinary activities, including issue of new stock, had to be cleared with the Commissioner, and violations could lead to forfeiture of charter."[15] Nevertheless, despite such explicit support by Roosevelt, Garfield, Taft, other politicians, and the press, measures instituting federal incorporation still failed to pass through Congress, due to the inability of legislators and the special interests influencing them to agree upon the specifics (e.g., the inclusion of labor organizations). There was agreement that the federal government could issue charters, but the exact terms of the charter were beyond consensus,[16] and with the creation of a central bank and the Federal Trade Commission in 1913-1914, the issue was ultimately dropped.[17]

Although reformers thus had limited success in curbing corporate power via federal chartering, they were able to alter one of the means by which corporations had been using their power to manipulate politics to their advantage: the election of U.S. senators. Proponents of the direct election of U.S. Senators believed that direct election would remove "the selection of United States Senators from the state legislatures, where it could be readily manipulated, and place it in the hands of the voters

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[11] Arthur M. Johnson, "Theodore Roosevelt and the Bureau of Corporations," *The Mississippi Valley Historical Review*, Vol. 45, no. 4. (March 1959): pp. 571-590. Page 575-6.
[12] Garfield, James R. "Publicity in Affairs of Industrial Combinations. *Annals of the American Academy of Political and Social Science*, Vol. 42, Industrial Competition and Combination. (Jul., 1912), pp. 140-146. Page 145.
[13] Urofsky, 173.
[14] Brabner-Smith, John W. "Federal Incorporation of Business." *Virginia Law Review* Vol 24, No. 2, (Dec. 1937) pages 159-166. Page 163.
[15] Urofsky, page 180
[16] Urofsky, 176.
[17] Joseph French Johnson, "The Crisis and Panic of 1907," *Political Science Quarterly*, Vol. 23, Nov. 3. (September 1908): pp. 454-467. Page 589, and Davis, 624.

where, presumably, it could not."[18] Between 1893 and 1902, the House adopted the measure on five different occasions, but each time "the amendment died in the Senate, where few members were willing to abolish the system to which they owed their seats."[19] Despite struggles in Congress, the Senate finally passed an amendment instituting the direct election of U.S. Senators in 1911 and, after approval by the House, President Taft, and the states, the Seventeenth Amendment became law in May 1913.[20] Thus, although the federal government could not control the growth of corporate powers through chartering, it would now at least be somewhat more independent from the potential political influence of these powers.

The U.S. Constitution: Undermining Firms' Accountability to Political Authority

Although there were many causes for the emergence of a business oligarchy and its undemocratic influences in the U.S., I believe that the root cause lay in the experiences of colonial America prior to the War for Independence. The abusive power of the British monarchy taught the Framers and their contemporaries the dangers of a strong state. Thus, when forming their own nation, they made sure to establish a weak state based upon a separation of powers among functions as well as levels of government. While the idea of a weak state fit early US circumstances, from 1787 to 1850 or so, it was inadequate to cope with post-Civil War circumstances, i.e., the rise of industrial and transport sectors with their great concentrations of private power in the growing continental market.

The Framers' deeply-rooted fear of federal power gave rise to a fundamental problem in the design of the Constitution. The states were empowered to charter firms, but had no powers to regulate their activities once these activities constituted or affected interstate commerce. At the same time the federal government had exclusive powers to regulate interstate commerce, but no powers to charter firms and therefore no power set conditions for their right to participate in that commerce. Federal regulation was from the outside-in, and thus based upon explicit rules that were parsed line by, line, instead of based on broad principles as a precondition for participation. Thus, the Constitution created what amounted to an unregulated commons for what would be, by 1900, the world's largest, richest market, home to many of the world's most powerful firms. As US industrial firms developed, states raced to the bottom in granting them powers without any corresponding responsibilities. Competing for employment and revenues from firms, states increasingly relaxed their charters' conditions; the limited charter was replaced first with the general purpose charter, granting firms the status of legal personhood to participate in any sector or location that they might choose, and then with a charter adding the protection of limited liability, granting firms a right that natural persons did not have. Firms were further empowered by the Contracts Clause of the Constitution, which forbid the states from interfering with the terms of a private contract and thereby gave credence to the notion that private purposes came ahead of those of society as a whole. External regulation came from the federal

[18] Buenker, John D. "The Urban Political Machine and the Seventeenth Amendment." *The Journal of American History*, Vol. 56, No. 2. (Sep., 1969). Pp. 305-322. page 305.
[19] Elizabeth Burt, *The Progressive Era: Primary Documents on Events from 1890 to 1914.* (Westport, Conn.: Greenwood Press, 2004) 328.
[20] Burt, 330.

government, limited by the Constitution and dependent upon external regulatory agencies such as the ICC or the Anti-trust Division of the Justice Department to enforce ultimate accountability on the firms. The efforts of these agencies' generally had very limited success since, without a federal chartering system, they lacked clear standards by which to establish such accountability.

In short, what was missing was a clear correlation between corporate rights and corporate responsibilities. Some external authority— state or the federal government—ought to have licensed firms to participate in interstate commerce only as long as these firms acknowledged that their license to operate came from a political authority and not their shareholders and that this license or grant subjected them to a number of conditions. For example, Wickersham's 1910 proposal for federal chartering required annual reports based upon strict standards of financial accounting, similar to the requirements established 25 years later by the Securities and Exchange Commission. More significantly, Wickersham's proposal included provisions to prohibit firms from entering into banking or from buying or holding stock in other firms. At a minimum, the latter would have checked further expansion of firms via holding companies and horizontal integration, a trend catalyzed and propelled by liberal state chartering powers in the late 19th century. Though probably too late to undo the rash of mergers and acquisitions since 1890, such legislation could have at least made any further consolidation conditional on Justice Department affirmation that the merger in question would not unduly reduce competition in the industry. In this way, external powers in the form of the federal government would have held firms accountable for their behavior in a top-down governance system.

Furthermore, a system of explicit federal chartering would have established beyond doubt that firms owed their existence as well as their rights to mobilize and utilize economic power to an external political authority. Without obtaining and abiding by the rules of an official grant from the federal government, firms would not be able to legally exist. Firms would have clearly owed their existence not to their shareholders or some form of spontaneous generation, but to a federal authority. Additionally, a system of federal chartering would have served as a reminder that firm privileges such as limited liability and hierarchical organization were granted by the state and were not "natural" rights generated by the markets. Yet federal chartering of non-financial never was (and never has been) established.

Implications for U.S. Capitalism

The federal government's very limited capabilities to hold firms accountable for how much power they were allowed to have and how they used it contributed to the growth of corporate oligarchy but also contributed to the subsequent distortion of the notion of capitalism, conceiving of it as a system of markets guided by the invisible hand of market forces, independent of the visible hand of any political authority. Over the 19th century, this distorted, ideologically-biased version of capitalism, based on the notion that somehow markets preceded both laws and political authorities, came to affect court decisions at the state and federal levels and ultimately to dominate not only legal theory but also economic theory in the form of neo-classical economics. Both realms—law and economics—failed to recognize that capitalism is above all a societal construct and not one based upon natural laws like physics or biology. Both realms defined the firm as independent from political authority and treated

market outcomes—however coercive in reality—as based upon voluntary transactions among private parties and therefore immune from review and modification by the state legislature. Holding firms—or any market actor for that matter—accountable to an external governing authority became the exception and not the rule.

Thus, the U.S. entered the 20th century under the sway of a corporate oligarchy whose power perpetuated a narrow and distorted conception of capitalism that was built on the highly artificial notion that economics and politics are and ought to be distinct. This flawed understanding of capitalism gave firms, via their managers and their financiers, the opportunity to subvert both capitalism and democracy for their own narrow interests. By the end of the 19th century they could easily abuse the largely unregulated U.S. commons for private gain at the public's expense. As long as these actors operated under what Horwitz calls "the assumptions of a self-executing market economy," any "unequal results were just," created not by self-interested individuals but by "the market process as a neutral and apolitical arbiter of the just distribution of wealth."[21] Because legal, economic, and political actors ignored the role of human agency—i.e., *their own roles*—in the development of U.S. capitalism, they failed to prevent and, to an extent, even abetted the rise of this oligarchy within the nation's increasingly productive economy.

Of most concern, however, is that this distorted, fundamentalist variant of capitalism has reemerged again since the 1970s. While some conservatives, and notably those who follow the teachings of Milton Friedman, view the early era of U.S. capitalism depicted in this chapter as a consensual market system they overlook the notion that the US capitalist frameworks were actively and systematically tilted by judges as well as legislators to favor a continuing accumulation of power in the hands of a class of capitalists. While this tilt undoubtedly contributed to economic growth, it came in part at the expense of those citizens who had little property or effective representation in the nation's economic and political systems and thereby reduced their relative opportunities to benefit from the system. Political decisions that allowed big firms to escape all but minimal regulation permitted economists, legal actors, and politicians alike to accept and defend often unjust distributional realities as the natural results of the economic laws of capitalism and therefore beyond the purview of the law. The emergent reality was driven as much by political institutions and political markets as it was by technological forces and larger markets.

This mis-diagnosis of capitalism as an economic system existing independent of the political system took hold in US laws and economics in the 19th century and remains very much alive and influential today. It is a view of capitalism in which capitalists expect to enjoy private gains as they take advantage of the legal powers conferred upon them by states to exploit market frameworks, and not just product markets but also the markets for capital, labor, public services and natural resources. It is a view that overlooks that the law allows firms to do what individuals may not normally do, which is to mobilize resources on a very large scale with the right to govern them, including all personnel, through very undemocratic hierarchies, and then to pass their wealth on through successive owners without

[21] Horwitz, 194

inheritance taxes. And finally, it is a view that allows capitalism to become an engine of economic inequality and corporate leaders to become oligarchs with powers rivaling those of lawfully elected government officials. This narrow and ideological view of capitalism has also permitted and continues to permit firms to abuse the tangible, physical common that is governed by a state for the benefit of its inhabitants as well as the intangible, commercial common that is designed to serve a similar purpose.

Chairman MILLER. That would be fine.
Dr. SCOTT. That is your problem.

DISCUSSION

A NEW METRIC FOR CORPORATE ACCOUNTABILITY

Chairman MILLER. I think all the witnesses spoke for more than five minutes but less than 50, so I appreciate the restraint.

Mr. Baird just left. I was going to call upon him. All right. I now recognize myself for five minutes of questioning. I won't pause to say I now recognize myself for a second round. I think you will understand I get to keep asking questions nonetheless.

Dr. Blair, I was interested in your discussion of the various constituencies and considerations that boards of directors should take into account, not just the financial interest of shareholders. My question is, who shall guard the guardians? How do we hold directors accountable and on what basis and how are they chosen? If they are elected by shareholders, why would shareholders not elect the members of the board who would do the most to act in their interest, their financial interest?

Dr. BLAIR. That is an excellent question. It goes right to the heart of one of the things that has driven what I regard as a cultural change in the last 20 to 25 years to bring directors around to thinking that they have to maximize share value. That is the argument that if they don't focus on a single metric, we don't have any way of holding them accountable. And my response to that is on several levels. First of all, the notion that, if you maximize shareholder value, it is really clear what you have to do, is crazy. Nobody knows what you are going to have to do to maximize share value, and so maximizing share value doesn't translate into a specific set of actions that directors are supposed to take, and at any point in time there is disagreement and contention potentially about whether or not the actions that the board is trying to take serve to maximize share value. My own view of this is that the corporation was formed with the idea in mind that what corporations should do is maximize the total wealth-creating capacity, and that that would mean that, you know, in an economic sense, if the shareholders are made better off, it should not be at the expense of some of the other stakeholders.

That is a vague mandate, which doesn't translate into specific instructions as to what they should do on a day-to-day basis. And I think up until about 25 years ago, the larger corporations, because they were very visible and because they had a brand and an image that they had to protect and because they tended to have loyalties to the communities where they were incorporated, the executives—maybe not perfectly, absolutely not perfectly—but at least they tended to think in terms of, "what are we doing for the long run health of the company, what are we doing and how is it going to affect the communities where we operate and how is it going to affect our customers?" I think that the emphasis on share value has caused many company directors and managers to lose sight of that bigger picture. Can you make them do it? Can you force them to do it? Probably not, but my first point is that we can't force them to maximize share value, either. That is my point.

But at a second level, when you think about what we can make corporations do, what I am a strong believer in is disclosure, and I think increasingly, we have had a tug and pull in the 1930's after the financial collapse—the Congress moved to put into place a system that would require publicly traded companies to disclose a lot, disclose a lot more than they used to. There is still an enormous amount they don't disclose, and I think if they are required to disclose what it is they are doing on a number of different fronts, they are going to be more responsible about what they do.

Chairman MILLER. I would love to pursue that further, but I will now yield back the balance of my time in the first round of questioning so that Mr. Baird, who I understand also has a markup like Ms. Johnson, may ask questions. Mr. Baird for five minutes.

CORPORATE INCENTIVES THAT ENCOURAGE LONG-TERM PROFIT

Mr. BAIRD. I really am fascinated by the topic of this hearing and thank the Chairman for holding it. Dr. Blair, I thought your testimony was quite enlightening because there is a sense that the fiduciary responsibility obligates the company to just look at sort of short-term profits. And you are saying that is not the case at all. You are saying that that is maybe an urban legend or something.

Dr. BLAIR. Yes.

Mr. BAIRD. It is not valid. What other incentives and what can or should the government do or not do—and this is not just for Dr. Blair, for all of our panelists—to try to get that longer-term commitment to the well-being not only of just the shareholder in the short-term but the communities in which the businesses operate, the workforce that may have been loyal to a company for 30 or 40 years or more, what kind of reforms can or should we do or not do? And that is to any of the panelists.

Dr. BLAIR. I will start if that is okay. I think the first and most important thing is that we need to make sure that there are not incentives in place that cause company executives and directors to have this preference for risk and preference for strategies that produce instant profit rather than long-term profit.

Now, there was an attempt in a sense—it is kind of ironic because there was a big push in the 1980's when corporate directors and managers were under a lot of pressure from the hostile takeover market. Then they began to say, well, if we have executives who are compensated in stock or in stock options, they will focus on share value and then they will be less vulnerable to takeovers. And prior to that, corporate managers were saying, you know, we have these other responsibilities and so we don't necessarily think that just because these outsiders think they can come in and buy the company for more that we should be required to sell it. And so we fixed that problem by radically changing the way corporate executives were compensated, to tie their compensation much more tightly to not just share value but to the value of the options which are a one-sided gamble. And stock options have a huge tax advantage relative to compensation in shares. I think if directors were paid and managers were paid in restricted stock that they had to hold for 10 years before they could sell it, that would cause them to have a very different set of incentives than what they have with

the compensation and stock options. That is where I would start. It is a big problem, but I think I would start there.

Mr. BAIRD. Dr. Gomory.

Dr. GOMORY. I agree with what Margaret has just said, but I have had I don't know whether it is 60 or 70 man years on corporate boards, and I have concluded that the people on those boards are humans and they are subject to the normal human emotions and attachments, all right? And when this whole business first became visible to me, it was in a world in which the directors wanted their companies to be successful and they cared quite a bit about the employees. I was an officer of IBM during its golden period.

Now, I think that they are still humans, but I think there are two problems. One is they believe the thing that Margaret says isn't there and she is right, which is it isn't their legal duty they believe it is to maximize shareholder value. The second thing, the compensation being tied to the share price and the sheer volume of shares given to leading executives is such that for most people, that amount of wealth is overwhelming.

I agree with Margaret that restricted stock—which goes up and down, not just one way—is a much better vehicle, but I would think that there should be less compensation, honestly, because these people do care about their companies and their people as anyone does who associates for a long time with them. But, they are overwhelmed in my opinion by what they see as the legal imperatives, some pressure from some of the totally financially oriented shareholders, and that overwhelms what was in the past and remains their natural instinct to care about their people, their community, and the other things because they are human, too. And I think we have in some sense overcome that normal tendency which had existed for decades and decades before the 1980's by a concerted effort to line them up with very active financial shareholders with these tempting, huge packages. I think they should not be there.

Mr. BAIRD. Did you want the time back, Mr. Chairman? I have got more questions, but I would be happy to give it up.

Chairman MILLER. Given that you have a markup and there is nobody else, why don't you go on?

EXECUTIVE COMPENSATION

Mr. BAIRD. Terrific. What are your thoughts about dealing with golden parachutes and retirement packages for executives? You know, we see increasingly these takeovers and mergers, et cetera, or business decisions that basically drive a company into the dirt, and the employees lose much of their retirement benefits but the guys at the top walk away with enormous compensation levels. Any merit to tying the fate of employees' benefit packages to the fate of the executive or board packages?

Dr. BLAIR. I like it in principle. The devil is going to be in the details, but yeah, I like it in principle.

Dr. GOMORY. And I feel exactly the same as Margaret. I think that is a very good direction. I mean, we don't have to have and we didn't have in the past corporate executives who were paid hundreds of times more than everyone else and who had these enor-

mous retirement packages at a time when the pensions of everyone else were being cut. But that is what we have now, and it is a distortion and I think it is one that we do not need.

Mr. BAIRD. Do you think that could be remedied statutorily, possibly?

Dr. GOMORY. Yes. I do agree with Margaret. It is not as simple as it sounds, but as a direction, it is the right way to go.

Mr. BAIRD. Are there any other incentives driving—one of the issues here is the globalization of jobs and the economy. What are other perverse incentives that you are aware of that may incline businesses to export jobs, particularly manufacturing jobs, that they might not want to do but that inherent structures in our legal code or our tax incentives don't force them to do but certainly reward them for doing? Have you identified some of these?

Dr. BLAIR. I have not focused on that in my work. I don't actually have a good answer for you.

Mr. BAIRD. Dr. Scott.

Dr. SCOTT. Yeah. We are into a transaction-driven system. Let me back up just one second. Executive compensation in this country has no parallel anywhere else, okay? It is much higher. And if you take a look at this over a period of time, just to go back to the '70s, the CEOs of our big companies are being paid on the order of 30 times their mean employee, and in Europe it was about 20. And that is what it was when I went to start doing research in Europe in the '60s. As we get to the end of the '70s, we begin to break away; and when we go through the '80s, we are out of bounds on this. But the reason for this, I think, is that we created the stock option, and the stock option cost was not a cost on the P&L statement. And in 1992, 1993, 1994, the Financial Accounting Standards Board said it ought to be, and there was enough pressure brought by people down here to say, "If you really try to put that on the P&L statement, we are going to so curtail your budget that you are not going to be able to do anything." And Arthur Levitt has written a very interesting account of what happened, and he just simply tells the Financial Accounting Standards Board, if you try to put this on the P&L statement, I will not back you. And the Accounting Standards Board only recommends, it was the SEC decision to say, "We are going to allow this to continue to go." So you have created a transaction-oriented system where you don't have to pay for it. The cost of the stock options drops directly to the bottom and doesn't have to go through the P&L statement until we get to 2004. So you have given the directors the right to give people free money, and that is what they did. And you can raise your earnings and raise your stock price by doing a deal with the Chinese, you can do it any way you want. It is the transactions that drive the stock and that drive your compensation. It is really a pernicious system.

Mr. BAIRD. What do you think we should do about that?

Dr. SCOTT. If I were doing it, I would find a way to outlaw the stock option entirely, and that may sound really weird——

Mr. BAIRD. You mean as a mechanism of compensation or——

Dr. SCOTT. Yes.

Mr. BAIRD. Okay.

Dr. SCOTT. Margaret mentioned the other alternative. The other alternative is treat the CEO more like a shareholder and say, "We are going to give you stock"; and when you do that, you have to record a cost. You can't give away stock without—you can give the option. Now you have to put something on it. But you have to give the stock, and if you are getting restricted stock you can't sell it for a good deal of time. Therefore, if the company has a down on this thing, you take it down along with the shareholders. It is a tremendous change. We have created a set of—this is a big part of your problem over in Financial Services, and if you go back to Martin Wolf writing about this in the *Financial Times* back in January, he said unless this is changed and unless it is changed by legislation, you are never going to correct this problem. The runaway is creating financial incentives—Margaret mentioned this just briefly—that have an upside that encourages people to take risk and no downside. The downside is paid by the shareholder and the taxpayer but not by the person taking the risk.

Dr. GOMORY. Let me add something to that. So far we have talked mostly about, you know, let us not have stock options, let us not do this, let us not do that. But I think we ought to decide what we want a corporation to do, we as a nation; and that might have something to do with where the jobs are and whether they are productive and things like that. And then we ought to make sure that our tax structure rewards that, not just pure profit because they won't get to keep it if they don't meet certain other criteria. If they are not productive, if they don't treat people right, if their skew of compensation is crazy. Why don't we try and incent the corporations to behave in the way we want them to? I think that is worth thinking about.

Mr. BAIRD. Thank you. Thank you for your indulgence, Mr. Chairman.

CORPORATE GOVERNANCE

Chairman MILLER. Thank you, Mr. Baird. I want to pursue the corporate governance issues that I had begun with Dr. Blair. This has also been debated as Dr. Scott suggested in the Financial Services Committee and corporate governance issues, specifically in executive compensation. And there are other critics of corporate governance who say that if actually corporations were acting to benefit 20 percent of the population, the 20 percent that Dr. Gomory says owns most of the stock, that would be more revolutionary than anything the Bolsheviks did or what happened in 1789 in France. That would be a remarkable change. The corporations are not actually even being governed to benefit the shareholders, that corporate boards are made up of CEOs of other corporations; and they all think that they are underpaid and they know that the salary or the total compensation for the CEO of a company on whose board they sit will be looked at by their own board as what their compensation should be. And the single best predictor of what exactly compensation will be is how many CEOs sit on the board, and particularly on the compensation committee.

There are critics. Dr. Blair spoke less than admiringly of shareholder advocates, but there are shareholder advocates who argue that if boards were required to act on behalf of the shareholders,

it would be a vast improvement in corporate governance, that actually executive compensations now have become a fairly significant part of overall profitability. And in fact, even these massive pension funds can't get to 50 percent because 70 or 80 percent of stock is now legally held by someone who is not the beneficial owner. In other words, brokerage houses that hold the stock of shareholders who never see the piece of paper, never actually claim the legal title to the stock, but are the beneficial owner. And they vote for the incumbent or for the slate of corporate boards proposed by the incumbent directors and California, North Carolina, UAW, any combination of pension funds can't outvote them.

Dr. Blair, do you disagree with that critique and why?

Dr. BLAIR. I think——

Chairman MILLER. I think you turned it off.

Dr. BLAIR. I think the critique has been taken way too far. I think it started out as a well-intentioned effort to try to make sure that corporate officers and corporate directors and managers were more accountable, but it has become an obsession and it has become an industry. The Delaware judge I quoted was Vice Chancellor Leo Strine, that over time we now have shareholder advisory firms, we have a substantial number of academics who are keenly interested in pushing a position in which we can create more and more control rights for shareholders. I think it is a very dangerous direction. I personally don't think that Carl Icahn knows better about what Yahoo should do than Yahoo's executives do.

Chairman MILLER. Dr. Gomory.

Dr. GOMORY. I think that you may have already made the point that I want to make, but I would like to—my actual experience with boards and worrying about takeovers and things like that is that a board of any significant corporation today knows there is a short list of people who control the shares. In this company that I have dealt with, it is about fourteen. Almost all are as you suggested I think earlier—they are financial houses of one sort or another. So when we are talking about having shareholder control, people's minds go to people, individuals. Not so, folks. It is really the financial houses.

Now, putting more control in their hands is not at all necessarily a good idea because you have to look——

Chairman MILLER. Are you talking about the brokerage houses that are buying shares for which they are not the beneficiary——

Dr. GOMORY. Yes, that is——

Chairman MILLER. Are you talking about——

Dr. GOMORY. Yes, exactly. Exactly that. Because you have to look at how those individuals are compensated in their financial firms. And if they are very sensitive—in hedge funds it is terrible, of course—through the share price, all you are doing is making the company more directly a financial object to be manipulated. You are not going to the people, you are going to the financial people and a small group of them.

PROPOSED RULE FOR NEW YORK STOCK EXCHANGE

Chairman MILLER. There is a proposed rule for the New York Stock Exchange—I think I am getting this right—that has been at the SEC for one and one-half years, not acted upon. Are you famil-

iar with that proposed rule? It would limit what the legal owner of stock could vote on, even if it deprived the board or the shareholder meeting of a quorum for some issues, unless they had specific directions from the beneficial owners, which would essentially mean the brokerage houses couldn't vote for board members, et cetera.

Dr. GOMORY. To answer your question, I am not aware of that, but I think it is an excellent direction.

Chairman MILLER. Dr. Scott.

Dr. SCOTT. I would have to disagree. If you go back to roughly 1960, the average share was held for somewhere between six and eight years, and so it was reasonable to speak of somebody as having a long-term interest. It doesn't mean they know anything about the company, but at least with a six- or eight-year holding, you are talking about somebody that has a long-term connection with the company. The average shareholding now is about one year. So when you are talking about a shareholder and saying does the shareholder have some kind of a long-term interest in the company, you have no way to have any bet on that at all. The change is we have, quote, "democratized ownership," but we have also reduced the cost of trading. People are trading much more. I mean, just go and pick up the statement of any mutual fund and look and see what is the average turnover on their funds. The average turnover on a lot of them is two times a year. Their real interest—and by the way, I think you are missing a term when you say it is brokerage houses. It is not brokerage houses, it is mutual funds and pension funds and insurance companies. And if you ask what is their big business, their big business is trying to attract additional assets that they manage. They don't want to antagonize any firm at the risk of losing its pension funds business. So they don't even want to have to vote their shares, they don't want to have to vote anything that would be considered hostile to management. They are trying to grow assets under management at the mutual fund, the pension fund, or whatever else, not really worrying about how the company is managed.

Chairman MILLER. I want to pursue that at another time, I think. Stocks held in street name, which are 70 to 80 percent of stocks are actually not stocks held by pension funds.

Dr. SCOTT. No, but your big holders are mutual funds.

FREE TRADE AND EQUALITY

Chairman MILLER. Dr. Gomory, obviously international trade affects not only American workers but workers all over the world, and when I was considering the CAFTA vote, I was lobbied vigorously by advocates for human rights in the CAFTA countries who said it would actually be bad for the workers in those countries, too, which is perhaps contrary to the common impressions of what the effect of trade is.

What is the effect of free trade, international trade, unrestricted international trade on workers in other countries, and what is the effect then on the distribution of wealth in those countries?

Dr. GOMORY. Well, first of all, I would like to say this is not a subject on which I have deep knowledge. I have had an awful lot of experience in the United States, but very limited in other coun-

tries, and I will simply report the impression that I have from those who know more, and the impression that I have received is that the globalization has reinforced whatever the economic structure was in these countries. If you had a ruling elite as you did in many—I am not talking about China of course, but take South American countries or others—that this has simply—they have been the principal gainers from globalization. So as I see that, in the United States, the wealthy have been also. That pattern I am told is repeated in other countries, but I am really relaying to you the opinions of others, not my own direct experience.

Chairman MILLER. Dr. Gomory, is there an economic benefit besides simply having a more fair society, of having a more even distribution of wealth, income, and what is that benefit?

Dr. GOMORY. Well, let us just stick to the United States. In the United States, we have had a productivity increase for 30 years, but people are, from the middle class on down, struggling to pay their bills. And it is not that the productivity increase wasn't there, it is just that they didn't get it. That is the downside.

Chairman MILLER. Dr. Scott.

Dr. SCOTT. Yeah, I would answer that very differently, not in any way contradictory. It has a huge impact in the United States. We are almost alone in operating our educational system at the first 12 grades on a market, and the market is local real estate taxes. You want to get a good school system, you now look and you say, "Who has the good school systems?" It is the people that have the big tax base. The big tax base is then wealthy people, and they are attracting more and more; and now we are getting segregated schooling all over the country out of this. Other countries pay their school teachers typically either by a province or by a Federal Government. We are paying them by local real estate taxes. So as you are building this, you are building a self-reinforcing thing. We no longer have mobility of the labor force that is greater than Europe. It is the other way around. So you are creating something where a whole lot of people are being deprived of the chance for a good education because they are in a school district that doesn't have the money to do it, and that is particularly what is going on around our big, urban areas. So yes, it does. We are going to deprive all sorts of people of a good education as the wealth concentrates and people learn to buy their way into a place where they can get a good school.

Chairman MILLER. Mr. Baird, do you wish to ask another round of questions?

Mr. BAIRD. I would, if I might.

Chairman MILLER. All right. Mr. Baird.

PENSION FUNDS

Mr. BAIRD. Given that incredible amounts of money are available in State and federal pension funds, can you talk a little bit about constructive or counter-productive roles pension funds can play and some of the kind of reforms you talked about?

Dr. BLAIR. Let me take that on. It is true that State and local pension funds have been among the most activist in the shareholder rights movement if you want to call it that. And it does seem to me that some of them have played very constructive roles

in the almost behind-the-scenes conversations that they have had with companies than the rhetoric that you see in the newspaper would tend to suggest—when General Motors was really in serious trouble in the 1980's, CalPERS, the California State Public Employees Retirement System, did some behind-the-scenes maneuvering along with a number of other institutional shareholders to pressure the board to change management and to make changes that needed to be made. And I certainly think that they have the potential to play a role in insisting on the overall performance of the company because they have a constituency that is in the state where they are operating in the community. So they ought to be paying attention to other beneficiaries as well—and what is good for the beneficiaries—both in the financial terms and in the larger picture. Ironically, corporate pension funds are actually precluded from doing that because of a Department of Labor ruling that said that pension funds that are regulated under ERISA are required to pay attention to the financial interest only and not to pay attention to other interests that might affect the beneficiaries of those pensions. It was kind of a perverse rule, but it was put in place in the 1980s, and it is not—as I understand it, it is a Department of Labor regulation, rather than a statute.

The thing about pension funds is that they tend to have the most long-run interests because there is money flowing into pension funds that is to be held there for 10, 20, 30 years for the beneficiaries. So they intend to have a more long-run focus. I don't think the problem is coming from pension funds, and I think they have a potential role that could actually be productive.

HEDGE FUNDS

Mr. BAIRD. Let us look at a different—and you may have mentioned this already so forgive me—the role of hedge funds in this issue in either making the problem worse or possible ways they could improve it.

Dr. BLAIR. I am not an expert on hedge funds. One of the things that really troubles me about hedge funds is that they don't disclose anything. They are not required to disclose anything. So we don't know how their executives are being compensated. There are stories that the hedge funds management gathers two percent of the gross amount of money under management plus 20 percent of the profits annually. That produces some outrageous results in which they can, by taking very high risk strategies, they get their two percent every year and then they can take off 20 percent when their strategy wins but they don't have to give any back when their strategy loses. And so they are in a heads-I-win, tails-you-lose situation. Now, what is puzzling to me is that the market hasn't regulated it, and I think the reason why the market hasn't regulated that so far is partly because they had a string of good years, and so it caused a lot of money managers, and even like private endowments, to say, "Well, let us put some of our money with these hedge funds." I would hope that in the wake of the financial crisis that has resulted from the mortgage lending and the securities that were based on mortgage lending, you will see some of these institutions saying, "Oops, maybe that wasn't such a good idea. Maybe we should not invest so much of our money with hedge funds." But I

am a strong believer in disclosure. I think if hedge funds had to disclose more of what they were doing that they would then be subject to embarrassment, and I believe in embarrassment as a regulatory device.

Mr. BAIRD. May I ask one other question, Mr. Chairman?

Chairman MILLER. I am sorry. I thank all the witnesses in the first panel for their testimony. If we could now have the testimony of the second panel, I think we will be called to votes before too much longer. I would like to see if we can get in the second panel's testimony. But, I thank all of you.

Panel II:

Thank you. I would now like to introduce our second panel. The first witness is Mr. James R. Copland, III. Mr. Copland is the Chairman of Copland Industries and Copland Fabrics located in Burlington, North Carolina. It is not in my long-term interest for all Americans to realize that some Southerners when they act unsophisticated and guileless actually have a pretty good idea of exactly what they are doing. They may just be playing you, and I pointed out to Mr. Copland that I did know in the past that he was a Morehead scholar at the University of North Carolina at Chapel Hill and son, Jason, who now works in the family business, has a Master's degree from the Amos Tuck School of Business at Dartmouth. So welcome, Mr. Copland, and I hope you don't give our secret away. Second is Mr. Brian O'Shaughnessy, who is the Chairman of Revere Copper Products located in Rome, New York, and third, Mr. Wes Jurey, the President and CEO of the Arlington Chamber of Commerce in Arlington, Texas. Mr. Jurey, I am sorry you did not get to meet your charming and capable Member of Congress, Eddie Bernice Johnson, but you are lucky to have her.

And now, all of you know that your oral testimony is limited to five minutes, and after that the Members of the Committee will have the opportunity to ask rounds of questions. Again, to put you at ease, we would like to put you under oath under penalties of perjury. Do any of you have an objection to being sworn in? And do any of you—are any of you represented by counsel? No? All right. If you would all now stand and raise your right hand? I understand Jason may also be testifying, so if you would stand as well? Do you swear to tell the truth and nothing but the truth? All right.

Mr. Copland, you may begin.

STATEMENT OF MR. JAMES R. COPLAND III, CHAIRMAN, COPLAND INDUSTRIES/COPLAND FABRICS, BURLINGTON, NC

Mr. JAMES COPLAND. First, thanks for the opportunity to speak before this esteemed committee.

America needs a new manufacturing policy. I don't believe that anyone in America is opposed to free trade as long as it is fair trade, but when foreign governments subsidize, manipulate their currency, flout legal requirements and tactically condone worker and environmental abuses, it is impossible for Copland or any domestic manufacturer to compete. Under such circumstances, Copland isn't competing against foreign companies but they are

competing against foreign governments. This is bad manufacturer policy.

Let us look at the People's Republic of China. They are the 800-pound gorilla in international trade. As a communist country, most of China's industry is government owned or quasi-government owned. The Chinese government buys their capital equipment, or in the case of quasi-government-owned companies, it guarantees the purchase. Chinese companies often end up paying zero capital costs, a tremendous advantage that no U.S. competitor can overcome.

In many cases, the Chinese government subsidizes utility and transportation costs but that is not all. China also provides a 17 percent export subsidy on goods shipped to the United States when it fully rebates value-added taxes. China's currency is pegged to the dollar and it is undervalued by approximately 40 percent. If our dollar goes down, the Chinese currency goes down. The yuan is not allowed to float on the world market like other currencies. This subsidy makes China's goods 40 percent cheaper in the market.

Finally, China has no EPA, no OSHA, no workmen's compensation, no unemployment insurance. Their whole system is different from ours, a communist system, yet U.S. manufacturers must compete against them, an impossible task.

People often talk about wage rights. Sure, China's wages are a mere fraction of ours with no child labor laws, no overtime, few benefits, but let me be perfectly clear. Wages are not the only issue. U.S. workers are much more efficient. In many cases, if a Chinese company's labor costs were free, they still could not compete without subsidies from their government. U.S. manufacturers would win hands down, absolutely. No company can compete when your competition is a foreign government determined to spend whatever it takes to force you out of the market and the U.S. Government does nothing about it. The U.S. Government recognized problems with the communist Soviet Union but for some reason it fails to see it with China. This is one of the things I mean when I say in my written testimony that the United States has an uncompetitive manufacturing policy.

I also want to talk about one aspect of trade agreements that has not been given proper emphasis, the human factor. Millions of Americans are losing their jobs. Their jobs are being moved overseas and they can't get other jobs. Don't think there are high-tech jobs available for those folks, because there aren't. They are being shipped to China and India too. Moreover, many of the factory workers being laid off in the United States aren't trained for those jobs, even if they did exist. If those that were laid off are lucky, they have landed jobs flipping hamburgers or as a greeter at some retail store. Every American deserves the right to provide for his family, to own a home and to educate his kids, but our flawed manufacturing and trade policies are taking this away. Our Constitutional preamble says a government of the people, by the people and for the people. We have forgotten about the words "for the people."

Go to the small towns in North and South Carolina. Mills are closed. Stores are closed with weeds growing up around them. But you know it is really bad when you see the churches closing. Someone needs to think about the hardworking people and what is hap-

pening to them. They are left out of the thought process when flawed manufacturing and trade policy is made. Let me say that the big multinational companies, the importers and big retailers have exactly what they want. They couldn't have written a book and had it more perfect for their world. Buy at the China price, sell at the U.S. price and don't worry about whether the average American has a job or he can make ends, meet but their world is not what is good for America.

You hear a lot of political candidates talking about the economy, our financial crisis and health care. They talk about the result but they don't talk about the cause. Subprime mortgages have been around for decades, car loans as long as there have been cars, credit cards for decades. The primary reason people can't make their payments now is because they don't have any money. In most cases, the reason they don't have any money is because they have lost their jobs or they now have jobs making a fraction of what their pay was before their jobs were exported. If these people had their manufacturing jobs, they wouldn't have the economic problems and financial problems we now have. People often got their health insurance from their jobs. Now many of those jobs have moved offshore because of our flawed trade agreements. No wonder we have a health care crisis. Americans just want their manufacturing jobs back. The U.S. Government's policy is creating millions of jobs, all right, but they are creating them in the People's Republic of China and Vietnam at the expense of hardworking Americans here at home.

Our country should be ashamed, totally ashamed of what our government has done to working people in America. People are angry now, and when they connect the dots, and they are going to connect them, they are going to know where to focus their anger.

[The prepared statement of Mr. Copland follows:]

PREPARED STATEMENT OF JAMES R. COPLAND III

Introduction

My name is Jim Copland and I am the Chairman of Copland Industries/Copland Fabrics, a company located in Burlington, North Carolina. Copland Industries/Copland Fabrics is a textile company whose main business historically serviced the home furnishings industry in the United States. We manufactured fabrics for curtains, draperies and blinds among other home furnishing products. Due to the U.S. home furnishing market being overrun by imports, especially by those of the subsidized variety from China, employment at Copland Industries/Copland Fabrics has fallen from more than 1,000 in recent years to less than 300 and we have been forced to exit many of our traditional business markets.

To give you an example of the one of the competitive challenges faced by Copland Industries/Copland Fabrics, in the man-made fiber curtain and blinds tariff lines not included in the U.S.-China textile bilateral agreement due to expire at the end of this year, U.S. imports from China exploded by 6,912 percent, jumping from 845,000 kilograms in 2001 to 59.265 million kilograms in 2007.[1] China accounted for almost 107 percent of the total U.S. growth in imports for those products during the time period, meaning the rest of the world actually lost U.S. import market share. In 2007, China held a 90.2 percent U.S. import market share for man-made curtains and blinds not under quota compared to a 7.7 percent market share in 2001. A flood of imports from China in products like the ones for which we used to make fabric is one of the main reasons why my home town of Burlington has lost nearly 40 per-

[1] Source: U.S. Office of Textiles and Apparel.

cent of its manufacturing jobs since 2001, making it the hardest hit metro area for manufacturing job loss in North Carolina.[2]

Copland Industries/Copland Fabrics also is a member of the American Manufacturing Trade Action Coalition (AMTAC), a lobbying organization dedicated to preserving and promoting domestic manufacturing. On May 1, 2008, my son Jason Copland, CEO of Copland Industries/Copland Fabrics, participated in a conference call press event where AMTAC released a comprehensive report on North Carolina jobs and manufacturing that provides the basis for much of the following testimony.

The two main points I want to drive home are these: (1) the U.S. Government's uncompetitive manufacturing **policy** is responsible for much of the steep decline in manufacturing employment and investment that significantly is hindering economic growth in the United States and in my home State of North Carolina and hurting working people; and (2) U.S. manufacturing will continue to suffer unless Congress and the Bush Administration intervene with policies that encourage rather than discourage manufacturing investment in the United States—and the first policy step in this direction is countering the predatory trade practices of China and other countries.

If the United States comprehensively were to address its manufacturing competitiveness policy problems, domestic manufacturers likely would rebound strongly. This is because only the most efficient, productive, nimble, and innovative companies have been able to survive the severe manufacturing economic downturn since 2001.

But let me be clear. As long as the current status quo on the U.S. Government's manufacturing policy continues, the United States will have much more difficulty ameliorating the pain an economic recession will inflict on its citizenry in a timely manner. To wit, the 2006 U.S. Department of Labor study of the 1.085 million U.S. manufacturing workers who were displaced between 2003 and 2005 from jobs that they had held for three or more years showed that only 64.5 percent of those workers gained reemployment and that just 20 percent of them found a job that paid better than the one they lost.[3]

Record Debt Stimulus Should Have Created Booming Domestic Manufacturing Sector

U.S. manufacturing is mired in the midst of a crisis unprecedented since the Great Depression. Deeply flawed U.S. trade policy toward domestic manufacturing is the single most important root cause of the illness, undermining U.S. manufacturing competitiveness on a global basis.

Absent a rational U.S. trade policy, U.S. manufacturing should be experiencing the best of times. Consider the following. Since 1950, U.S. Gross Domestic Production (GDP) has grown 550 percent in inflation-adjusted terms[4] while the U.S. population has doubled from 150 million to 303 million. Since 1990, U.S. GDP has grown by a little more than 50 percent in inflation-adjusted terms while the U.S. population has increased by 54 million.[5]

Moreover, the percentage of U.S. GDP used for consumer consumption has been above 70 percent in each of the previous six years.[6] Noting this figure, it should not be surprising that U.S. household and Federal Government debt has skyrocketed to unprecedented levels. Together, household and federal debt almost have doubled over the past seven years, soaring by $10.4 trillion to reach $23.1 trillion, an amount 64 percent larger than the entire Gross Domestic Product (GDP).[7] In comparison, total U.S. household and federal debt was 27 percent larger than GDP at the end of 2000. While the current record debt level is the basis for the debt crisis that now has plunged the United States into a new and possibly severe recession, in recent years it should have served as the greatest stimulus to U.S. manufacturing since the need for production to fight and win World War II.

Instead, the United States by far suffered its slowest seven-year job growth since the demobilization following World War II. Although the U.S. Census Bureau estimates that the U.S. population grew by 6.9 percent, expanding by 19,622,932 people from 283,946,833 on January 1, 2001 to 303,569,765 on January 1, 2008, the United States added only 5,587,000 jobs for a seven-year employment increase of 4.2 per-

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[2] Source: U.S. Bureau of Labor Statistics.
[3] Source: U.S. Department of Labor. See: *http://www.bls.gov/news.release/disp.t07.htm*
[4] Source: U.S. Bureau of Economic Analysis.
[5] Sources: U.S. Bureau of Economic Analysis and U.S. Census Bureau.
[6] Sources: U.S. Department of Commerce, U.S. Bureau of Economic Analysis, and MBG Information Services.
[7] Sources: U.S. Department of the Treasury, U.S. Department of Commerce and MBG Information Services.

cent, growth far short of the 9,140,000 job creation figure necessary to maintain employment participation rates at January 2001 levels. The U.S. manufacturing sector suffered even worse, losing 3,361,000 jobs.

Additionally, annual inflation-adjusted U.S. GDP growth has been weak, averaging just 2.55 percent per year for the seven-year period ending in 2007.

Indicators of the National Manufacturing Crisis

Rather than showing strong gains in employment, capacity, output, and investment that normally would be expected in an economy experiencing the level of consumer stimulus that the United States has seen in recent years, the evidence instead demonstrates that U.S. manufacturing has slumped severely.

Last year, the United States ran a trade deficit of $708.5 billion, including a $498.9 billion deficit in manufacturing goods. The cumulative numbers even are more troubling. Since 1980, the cumulative U.S. trade deficit is $6.365 trillion, with manufacturing goods accounting for $5.249 trillion of that figure. Of even greater concern, almost 59 percent of that trade deficit in manufactured goods, $3.08 trillion, has been accumulated since 2001. Even the U.S. dollar's 24.2 percent fall against the U.S. Federal Reserve Board's price-adjusted "Broad" Index of world currency values since January 2002[8] has failed to increase U.S. exports enough materially to stanch the trade red ink.

The United States cannot continue to withstand the problems associated with a runaway trade deficit indefinitely. But don't just take my word for it; others agree:

- "The present level of the current account deficit is enormous, it is unprecedented and I believe it is unsustainable."
  — Martin Feldstein, Professor of Economics at Harvard University, former Chairman, Reagan Council of Economic Advisors
- "[T]he United States must now attract almost $7 billion of capital from the rest of the world every working day to finance its current account deficit and its own foreign investment outflows."
  — C. Fred Bergsten, Director, Institute for International Economics
- "[O]ur trade deficit has greatly worsened, to the point that our country's "net worth," so to speak, is now being transferred abroad at an alarming rate. A perpetuation of this transfer will lead to major trouble."
  — Warren Buffet, Chairman, Berkshire Hathaway

So, how can it be that the United States, a country that possesses the most sophisticated industrial complex in the world, spends billions on research and development and product innovation, and has one the world's most advanced transportation, communication, and higher educational infrastructures, cannot run a trade surplus in virtually any manufacturing sector?

2007 U.S. Trade Deficits in Key Manufacturing Sectors

- $ 115.7 billion in vehicles
- $ 105.1 billion in TVs, VCRs, and other electronics
- $ 88.9 billion in textiles and apparel
- $ 71.9 billion in computers and office machines
- $ 44.4 billion in "Advanced Technology Products"
- $ 28.8 billion in furniture and parts thereof
- $ 16.9 billion in iron and steel mill production
- **$ 498.9 billion in all manufactured goods**

Source: U.S. Bureau of the Census and MBG information Services

The reason why the United States runs massive trade deficits in products where free-trade theory posits America should have a comparative advantage is because foreign government intervention negates comparative advantage with value-added

[8] Source: Federal Reserve Board's price-adjusted "Broad" Index of currency values.

tax schemes, manipulated currencies, State sponsored subsidies, lack of protections for intellectual property rights, below market interest rates, and non performing loans that create an absolute advantage for their manufacturers.

These foreign predatory practices often are compounded by other factors such as pennies-per-hour labor, blatant disregard for environmental protection, lack of reasonable labor rights and workplace safety standards, and lack of basic benefits such as health care.

Consequently, it should surprise no one that other key economic health indicators for U.S. manufacturing show either an industry in distress or the weakest growth on record in the last six decades.

The U.S. manufacturing sector's inflation-adjusted capital expenditures for plant and equipment have plunged dramatically. The 2006 expenditure amount of $116.6 billion was smaller than each of the amounts for 1978 ($120.7 billion), 1979 ($124.2 billion), and 1980 ($129.7 billion), the last three years of President Jimmy Carter's Administration. Furthermore, it was considerably lower than the $158.8 billion expenditure peak in 1997.

U.S. Manufacturing Inflation-Adjusted Capital Expenditures for Plant and Equipment 1950-2006

Year	Inflation-Adjusted Expenditures in $ Billions	Year	Inflation-Adjusted Expenditures in $ Billions	Year	Inflation-Adjusted Expenditures in $ Billions
1950	30.5	1969	85.2	1988	107.8
1951	43.9	1970	80.5	1989	125.7
1952	43.7	1971	72.4	1990	128.7
1953	44.1	1972	79.8	1991	122.0
1954	44.5	1973	84.7	1992	128.0
1955	43.9	1974	102.4	1993	122.9
1956	57.9	1975	98.1	1994	130.7
1957	60.6	1976	101.2	1995	145.8
1958	46.6	1977	111.0	1996	156.0
1959	44.0	1978	120.7	1997	158.8
1960	48.0	1979	124.2	1998	158.3
1961	46.0	1980	129.7	1999	153.6
1962	48.4	1981	133.0	2000	154.5
1963	52.2	1982	118.9	2001	140.3
1964	60.1	1983	95.0	2002	118.2
1965	73.7	1984	111.1	2003	105.4
1966	87.3	1985	119.1	2004	104.0
1967	89.9	1986	107.2	2005	113.5
1968	82.7	1987	107.5	2006	116.6

Source: U.S. Census Bureau, Annual Survey of Manufactures (ASM).

Inflation adjusted figures for Year 2000 dollars were calculated using multipliers derived from comparing nominal U.S. GDP published U.S. Bureau of Economic Analysis to inflation-adjusted numbers published by same agency.

Figures from 1992-2006 include expenditures for both new and used plant and equipment. Expenditures on used plant and equipment averaged just more than 4 percent of expenditures from 1992-1996. Figures from 1991 and earlier are for new plant and equipment only.

U.S. manufacturing capacity also has grown at a slower rate in the 2000s than in any of the past six decades. Growth was 50 percent for the 1950s, 63 percent for the 1960s, 38 percent for the 1970s, 25 percent for the 1980s, and 57 for the 1990s. Projected growth for the 2000s has fallen to a mere 16 percent or 1.6 percent per year.[9]

U.S. manufacturing output numbers tell a similar tale as output in the 2000s has grown at a slower rate than in any decade since the 1950s. Output growth was 69 percent for the 1950s, 54 percent for the 1960s, 40 percent for the 1970s, 23 percent for the 1980s, and 56 percent for the 1990s. Projected output growth for the 2000s is an anemic 13 percent or 1.3 percent per year.[10] For the category that covers much

[9] Source: Federal Reserve Board, Industrial Capacity, Manufacturing (SIC), Not Seasonally Adjusted.

[10] Source: Federal Reserve Board, Industrial Output, Manufacturing (SIC), Not Seasonally Adjusted.

of the Copland Industries production, U.S. Textile Mills, output is down 50.4 percent from its peak in December 1997.

Finally, U.S. manufacturing employment collapsed between 2000 and 2003 and has yet to recover from the downturn. It now has plummeted to 13.6 million, its lowest level since May 1950 one month prior to the eruption of the Korean War. Employment in the U.S. textile and apparel sectors has been even harder hit, falling from 1,048,300 in January 2001 to 506,200 in April 2008—a loss of 542,100 jobs and a decline of 51.7 percent.

U.S. Manufacturing Employment in Millions
Figures are for January of each year, not seasonally adjusted.

1950 – 13.122
1955 – 14.939
1960 – 15.559
1965 – 16.044
1970 – 18.254
1975 – 17.115
1980 – 19.132
1985 – 17.680
1990 – 17.648
1995 – 17.133
2000 – 17.179
2005 – 14.142
2008 – 13.632

Source: U.S. Bureau of Labor Statistics

Pollyannas arguing that little is wrong with U.S. manufacturing cite U.S. manufacturing productivity increases as the main reason for employment decline. Although U.S. manufacturing productivity indeed has doubled in recent years, U.S. demand for manufactured goods has tripled. Because U.S. growth in demand for manufactured goods exceeds growth in productivity, the United States should be adding manufacturing jobs instead of losing them if it were maintaining its market.

The real culprit in the loss of U.S. manufacturing jobs is the loss of markets and the loss of domestic markets to offshore producers in particular. Since 1980, U.S. demand for durable manufactured goods has soared nearly 400 percent. U.S. production of durable manufactured goods, however, only has grown by 40 percent of that total.[11] To further illustrate this point, U.S. Business and Industry Council Research Fellow Alan Tonelson conducted a study on import penetration rates for 114 high tech and other capital-intensive industries in the U.S. manufacturing sector. His research showed that import penetration rates for those industries jumped by 58.6 percent from a penetration rate of 21.4 percent in 1997 to 33.9 percent in 2006.[12]

New Competitive Trade Policy Needed to Restore Health of U.S. Manufacturing

Considering the undeniable plight of U.S. manufacturing, a comprehensive new U.S. trade policy to boost competitiveness desperately is needed.

Require Reciprocity—U.S. trade policy must be redirected to its original roots in reciprocity, a concept clearly not present in the global economy's chief trade regime, the World Trade Organization (WTO). In the Uruguay Round, the United States agreed to lower or eliminate most barriers to its market for manufactured products without receiving commensurate market access from the rest of the world in return. Today, the average U.S. bound tariff for industrial products is three percent, while the average worldwide bound tariff is 30 percent.[13] Moreover, the average trade weighted U.S. industrial tariff stands at less than 1.7 percent.

In this regard, one significant problem is the ability of WTO members to self-designate themselves as "developing countries," a status granting them more favorable trading privileges than self-designated "developed" countries such as the United

[11] Source: U.S. Commerce Department, U.S. Federal Reserve and MBG Information Services.

[12] See USBIC Research Alert, *New Data Show Import Growth Depressing U.S. Industrial Output; Advanced U.S. Manufacturers Keep Losing Ground in Home Market,* by Alan Tonelson and Sarah Linden, January 8, 2008.

[13] Statement of Senator Charles Grassley at Senate Finance Hearing on WTO negotiations 10/27/2005.

States. The ability of WTO members to self-designate their country status must be eliminated and replaced with objective criteria that accurately measure a country's ability to compete in the global trading arena.

Take China for example. While it may be a developing country in many respects, it is an international superpower in terms of global trade. In both 2006 and 2007 China exported more manufacturing goods to the world than did the United States.[14] Yet under the current WTO regime, China is allowed to maintain high tariff walls and other substantial non-tariff barriers to market access as a self-designated "developing country."

The ongoing Doha Round negotiations only further would exacerbate the lack of reciprocity afforded to U.S. producers. The Doha Round's Non-Agricultural Market Access (NAMA) text grants numerous exemptions to developing countries such as that contained in the Hong Kong Declaration's paragraph 14, "Take fully into account the special needs and interests of developing countries including through less than full reciprocity in reduction commitments." The NAMA Chairman's July 2007 text states, "There is almost unanimous support that a simple Swiss formula with two coefficients should be adopted." Finally, for developed countries such as the United States, the maximum industrial tariff allowed proposed in the current NAMA negotiations is to be between eight and nine percent. In contrast, developing countries such as China will be allowed a tariff ceiling that would fall between 19 and 23 percent.

Offset the VAT Border Tax Disadvantage—Currently, 149 countries, accounting for approximately 95 percent of all U.S. trade, utilize a border-adjusted, value-added (VAT) tax system implemented at average rate of 15.4 percent. This tax often is among a country's most significant revenue sources to pay for such expenditures as nationalized health care and other vital government services.

Countries utilizing value-added tax systems impose those taxes on the cost of an import plus all shipping, handling, insurance and tariff expenses. They also rebate any VAT paid on a domestically produced good that is exported. Meanwhile, the United States neither rebates the taxes paid by a producer upon the export of a good nor imposes a significant tax burden on imports.

Consequently, goods produced in VAT countries have a built-in price advantage over their U.S. counterparts. Producers in VAT countries often are able to export goods at a price that deducts the U.S. equivalent of payroll and other taxes that are used to pay for social security, unemployment insurance, and health care costs. U.S. producers not only pay those U.S. taxes in the process of manufacturing domestically produced goods, they also are forced to pay them in other countries the moment a U.S. export is slapped with a VAT. AMTAC estimates that border-adjusted VAT schemes disadvantaged U.S. producers and service providers by a staggering $428 billion in 2006.

Ordinarily, a VAT would be viewed as an impermissible export subsidy under current trade rules. Unfortunately, in the years following World War II, the United States agreed to a loophole under the old General Agreement on Tariffs and Trade (GATT) the exempted VAT subsidies. Since allowing that loophole, use of the VAT grew from just France to almost the rest of the world, 149 countries. And as one would expect, VAT rates often have risen as tariff rates have fallen, creating a constant, but less visible barrier to U.S. exports. For the European Union (EU), the average barrier to U.S. exports has remained nearly constant at 23.8 percent since 1968.[15] Although the average EU tariff has dropped from 10.4 percent in 1968 to 4.4 percent in 2006, the average EU VAT has risen from 13.4 percent to 19.4 percent.

Last year, Congressmen Bill Pascrell (D–NJ), Duncan Hunter (R–CA), Mike Michaud (D–ME), and Walter Jones (R–NC) introduced H.R. 2600, the *Border Tax Equity Act,* to offset the VAT disadvantage to U.S. producers and service providers. Congressman Steven Rothman (D–NJ) of the Science and Technology Committee's Subcommittee on Oversight and Investigations also is among the 15 total (seven Democrats and eight Republicans) House Members currently sponsoring the bill. H.R. 2600's swift enactment is a key to restoring U.S. manufacturing health.

Make Currency Manipulation an Actionable Subsidy—U.S. congressional and executive inaction against blatant currency manipulation by China is inexcusable.

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[14] Sources: U.S. Department of Commerce, China Customs, and MBG Information Services.

[15] Sources: Simple averages of MFN tariff rates on industrial products applied by EU countries are from the OECD and UNCTAD. For 2006, the latest available tariff rate from UNCTAD, for 2003, is assumed to remain constant. Simple averages of standard VAT rates of EU members with a VAT in effect are from the European Commission. Aggregate trade barrier is the sum of the average tariff rate and the average VAT rate for each year examined.

For years that country has pegged the value of its currency, the yuan, to the U.S. dollar at an artificially low rate. Factoring inflation, the value of the yuan has risen in value by less than five percent against the U.S. dollar since its peg was "loosened" to a basket of currencies in 2005. This policy has enabled China to simultaneously lower the cost of its exports and raise substantial barriers to imports.

Since 2001, the year China joined the WTO, the U.S. merchandise trade deficit with that country has exploded from around $80 billion to a staggering $256 billion in 2007.[16] The cumulative U.S. trade deficit with China during that same time period for manufactured goods was a staggering $1.2 trillion!

The United States imported $313.6 billion in manufactured goods from China in 2007. If, for example, China were undervaluing its currency by 35 percent, a figure not unreasonable to many experts, it would amount to a subsidy of nearly $110 billion to Chinese manufacturing exporters. With subsidies like this, its should surprise no one that less productive and efficient Chinese manufacturers can ship their products halfway around the world to the United States and still undercut the prices of their U.S. competitors.

Congressmen Tim Ryan (D–OH) and Duncan Hunter (R–CA) have introduced H.R. 2942, the *Currency Reform for Fair Trade Act of 2007,* to discourage currency manipulation by China, Japan, and other countries. A total of 44 Democrats and 31 Republicans (75 House Members total) are sponsoring the bill, including U.S. Representatives Eddie Bernice Johnson (D–TX), Dana Rohrabacher (R–CA), and James Sensenbrenner (R–WI) of the Science and Technology Committee's Subcommittee on Oversight and Investigations.

H.R. 2942's strongest deterrent is a provision that would make currency manipulation an actionable subsidy under U.S. countervailing duty (CVD) law. Enactment of this legislation is imperative if the United States is to reduce its manufacturing and trade policy competitiveness gap with China, Japan and others.

Separate Trade Enforcement from the Office of the U.S. Trade Representative—It is unreasonable to expect that an office who on one hand is charged with negotiating trade agreements with other countries to then be able to turn around and impartially punish them when they run afoul of U.S. trade law. The conflicts of interest inherently are too great. As such, all enforcement of U.S. trade law should be separated from the Office of the U.S. Trade Representative (USTR).

A separate U.S. governmental entity should be set up as an independent agency or in another cabinet-level department, such as the U.S. Department of Commerce, to enforce U.S. trade law. This body would be charged with aggressively pursuing dumping, subsidy and intellectual property rights violation cases within the U.S. judicial and regulatory system and at the WTO. The anti-competitive dumping and illegal subsidy practices revealed in recent cases against China (the case on coated free sheet paper is a good example) should provide enough work to keep any enforcement agency busy for years.

Also as part of this reform, the U.S. Government should reduce the cost and barriers to U.S. manufacturers attempting to bring trade enforcement cases. Presently, anti-dumping and CVD cases often cost millions for U.S. manufacturers to prosecute effectively. Even after making such a financial commitment, a favorable outcome is not guaranteed. In addition, U.S. manufacturers in a product's supply chain often have almost no access to trade law remedies due to a lack of standing. Only the assemblers of the final product and/or its workers, i.e. a union, usually effectively have standing to file a case. These costs and barriers deter the filing of many legitimate trade cases. The United States should consider adopting reforms to mimic the European Union where manufacturers would submit data indicating a likelihood of dumping or CVD infraction and the government then would investigate them and render a decision.

Stop Negotiating FTAs With Countries That Cannot Buy Finished U.S. Goods—Finally, the United States should stop negotiating free trade agreements with countries or economic regions that either are unwilling or unable to buy finished U.S. goods at the same rate they export to the United States.

Flawed U.S. free trade agreements demonstrably have fueled the U.S. trade deficit. Measuring U.S. Government data for domestic exports[17] minus imports for con-

[16] Sources: U.S. Department of Commerce, U.S. Bureau of Economic Analysis, and MBG Information Services.

[17] Domestic Exports are defined as exports of domestic merchandise include commodities which are grown, produced or manufactured in the United States, and commodities of foreign origin which have been changed in the United States, including U.S. Foreign Trade Zones, or which have been enhanced in value by further manufacture in the United States.

sumption,[18] the U.S. trade deficit with our free trade partners has skyrocketed since 1989 from $13.55 billion to a whopping $187.84 billion in 2007.[19] With just Canada and Mexico between 1994 and 2007, the United States ran a cumulative trade deficit in manufacturing goods of $397.6 billion, a merchandise trade deficit of $1.071 trillion, and a current account deficit in goods and services of $942.2 billion.

U.S. Trade Deficits with FTA Partners 1989-2007

1989 (Israel + Canada): -$13,549,305,466
1990 (Israel + Canada): -$13,395,009,866
1991 (Israel + Canada): -$12,206,751,399
1992 (Israel + Canada): -$15,179,629,034
1993 (Israel + Canada): -$19,088,159,601
1994 (Israel, Canada, Mexico): -$25,429,628,843
1995 (Israel, Canada, Mexico): -$49,369,863,070
1996 (Israel, Canada, Mexico): -$58,021,526,324
1997 (Israel, Canada, Mexico): -$52,183,393,917
1998 (Israel, Canada, Mexico): -$57,504,788,445
1999 (Israel, Canada, Mexico): -$83,674,235,439
2000 (Israel, Canada, Mexico): -$114,509,613,954
2001 (Israel, Canada, Mexico): -$118,007,897,734
2002 (Israel, Canada, Mexico, Jordan): -$123,167,746,864
2003 (Israel, Canada, Mexico, Jordan): -$137,750,076,888
2004 (Israel, Canada, Mexico, Jordan, Singapore, Chile): -$162,306,487,398
2005 (Israel, Canada, Mexico, Jordan, Singapore, Chile, Australia): -$174,084,390,236
2006 (Israel, Canada, Mexico, Jordan, Singapore, Chile, Australia, Morocco): -$189,415,360,242
2007 (Israel, Canada, Mexico, Jordan, Singapore, Chile, Australia, Morocco, El Salvador, Honduras, Nicaragua, Guatemala, Bahrain): -$187,843,239,265

Source: U.S. International Trade Commission

Instead of seeking out negotiating partners in small or developing countries, the United States should be targeting agreements or economic alliances with countries that have lucrative consumption markets and a settled rule of law. Japan or the European Union would be examples of two good candidates. These trade partners both have sufficient large populations and high standards of living to buy sizable quantities of U.S. exports if a good free trade agreement were negotiated and properly enforced.

Conclusion

Despite the hardships it has faced, the health of U.S. manufacturing quickly can be restored if the United States addresses its manufacturing policy competitiveness issues by fixing its broken trade policy. Weak and inefficient U.S. manufacturers closed their doors years ago. Only the strongest and most efficient U.S. manufacturers have been able to survive in such a hostile competitive atmosphere. These companies will be well placed to ramp up new investment, reclaim lost market share, and add employment if the U.S. Government boosts competitiveness by removing trade policy obstacles impeding their success.

[18] Imports for Consumption measure the merchandise that has physically cleared Customs either entering consumption channels immediately or entering after withdrawal from bonded warehouses under Customs custody or from Foreign Trade Zones.
[19] Source: U.S. Department of Commerce.

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U.S. Government's Uncompetitive Manufacturing Policy Hinders Economic Growth in North Carolina

A Report by the American Manufacturing Trade Action Coalition

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May 1, 2008

Introduction

The U.S. government's uncompetitive manufacturing **policy** is responsible for much of the steep decline in North Carolina's manufacturing employment and investment that significantly hinders the state's economic growth. U.S. manufacturing will continue to suffer unless Congress and the Bush Administration intervene with policies that encourage rather than discourage more manufacturing investment in the United States. The first step in that process is countering the predatory trade practices of China and other countries. But as long as the current status quo on the U.S. government's manufacturing policy continues, North Carolina and the United States will have much more difficulty ameliorating the pain an economic recession will inflict on its citizenry in a timely manner. If the United States comprehensively were to address its manufacturing competitiveness policy problems, however, North Carolina's manufacturers likely would rebound strongly. This is because only the most efficient, productive, nimble, and innovative companies have been able to survive the severe manufacturing economic downturn since 2001.

North Carolina Suffers Plunging Manufacturing Employment

As with the rest of the country, North Carolina's hemorrhaging of manufacturing jobs has hindered net new job creation. Between January 2001 and January 2008, manufacturing employment in North Carolina plunged by 28.5 percent, a loss of 211,100 jobs. Not only is North Carolina's manufacturing job loss considerably worse even than the record shattering U.S. figure of 19.7 percent, only Rhode Island and Michigan experienced a greater percentage of loss.[1] Five manufacturing sectors in North Carolina each lost more than 16,000 between 2001 and 2008.[2]

North Carolina Manufacturing Employment Gain/Loss from 2001 to 2008 by Metropolitan Statistical Area (MSA)[3]

MSA	January 2001	January 2008	Gain/Loss	Percent
Asheville	27,300	20,600	(6,700)	-24.5
Burlington	18,100	10,900	(7,200)	-39.8
Charlotte/Gastonia/Concord[4]	95,000	69,900	(25,100)	-26.4
Durham	44,200	41,300	(2,900)	-6.6
Fayetteville	15,000	9,900	(5,100)	-34.0
Greensboro/High Point	78,400	61,900	(16,500)	-21.0
Greenville	9,900	7,100	(2,800)	-28.3
Hickory/Lenoir/Morganton	77,600	48,600	(29,000)	-37.4
Raleigh/Cary	39,000	32,500	(6,500)	-16.7
Rocky Mount	13,600	9,300	(4,300)	-31.6
Wilmington	12,500	8,900	(3,600)	-28.8
Winston-Salem	37,300	28,900	(8,400)	-22.5
North Carolina MSAs Total[5]	467,900	349,800	(118,100)	-25.2
Rest of State[6]	273,200	180,200	(93,000)	-34.0
Statewide	741,100	530,000	(211,100)	-28.5

Source: U.S. Bureau of Labor Statistics

[1] Source is the U.S. Bureau of Labor Statistics (BLS). Analysis is by Dr. Charles W. McMillion, President and Chief Economist of MBG Information Services. Also see Appendix page A-10.

[2] See Appendix page A-2 for North Carolina manufacturing employment loss by sector.

[3] See Appendix page A-1 for North Carolina MSA definitions.

[4] This data is an estimate only for manufacturing employment gain/loss in the North Carolina portion of the Charlotte/Gastonia/Concord MSA. The MSA consists of Anson County, NC; Cabarrus County, NC; Gaston County, NC; Mecklenburg County, NC; Union County, NC; and York County, SC. Manufacturing employment in York County, SC was 10,900 in January 2001 and 10,200 in October 2007, the latest data for which statistics are available from the U.S. Bureau of Labor Statistics. The York County, SC manufacturing totals were subtracted from the MSA's total manufacturing employment numbers of 105,900 in January 2001 and 80,100 in January 2008 to obtain the estimate listed.

[5] This figure is an estimate based on Footnote #2 above.

[6] This figure is an estimate based on Footnote #2 above.

North Carolina Manufacturing Investment Plummets Too

Accompanying North Carolina's steep decline in manufacturing employment is a corresponding lack of investment in manufacturing in the state. According to the U.S. Census Bureau's Annual Survey of Manufactures (ASM), North Carolina manufacturers invested $4.015 billion in capital expenditures for plant and equipment in 2006 in nominal terms. While this annual figure is up from each of the years 2003-05 inclusive, it is down from each of the years 1993-2002 inclusive.

Even more troubling is the inflation-adjusted data for North Carolina manufacturing capital expenditures for plant and equipment. The inflation adjusted figure for 2006 not only was lower for each of the years 1992-2003 inclusive, it also was lower than both 1987 and 1982! Comparing inflation-adjusted capital expenditures for plant and equipment from 1995-2000 to 2001-2006 expenditures declined from the first six-year period to the second by 28.7 percent or $9.63 billion, falling from $33.51 billion for 1995-2000 to $23.88 billion for 2001-2006. Inflation-adjusted capital expenditures by individual North Carolina manufacturing sector are available in the Appendix.[7]

North Carolina Manufacturing Capital Expenditures for Plant and Equipment in Inflation-Adjusted Year-2000 Dollars

Year	Inflation-Adjusted Expenditures
2006	$3,787,902,170
2005	$3,612,378,840
2004	$3,339,643,666
2003	$3,605,112,989
2002	$4,250,733,446
2001	$5,085,644,500
2000	$5,346,615,000
1999	$6,908,949,746
1998	$5,112,238,574
1997	$5,465,293,344
1996	$5,199,640,000
1995	$5,481,599,300
1994	$5,552,130,060
1993	$5,031,101,600
1992	$4,683,649,600
1987	$4,041,584,200
1982	$4,126,225,400
1977	$3,148,666,700

Source: U.S. Census Bureau, Annual Survey of Manufactures. Analysis by AMTAC.

[7] See Appendix pages A-3 through A-9.

Manufacturing Job Losses Hinder New Job Creation in North Carolina

As a result, although North Carolina added 246,800 jobs and saw its employment growth rate of 6.4 percent eclipse the national rate of 4.2 percent in the last seven years[8], the employment growth rate was barely more than half of North Carolina's estimated population growth rate of 12.5 percent.[9] Moreover, North Carolina's job losses from the worsening trade deficits with China doubled from slightly more than 27,000 in 2000 to nearly 59,000 in 2007, a loss of 32,000 jobs.[10]

As High-Wage Jobs Are Lost, North Carolina Incomes Fall While Debt Rises

The loss of higher-wage jobs in manufacturing and in other sectors (almost certainly) caused household incomes to lose purchasing power in North Carolina and in the United States for the first time during any business cycle since the Depression. The U.S. Census Bureau has not yet released household income figures for 2007, but inflation-adjusted median incomes in North Carolina fell by 11.3 percent, declining by $5,065 from $44,862 in 2000 to $39,797 in 2006.[11] Only Missouri, Mississippi, and Minnesota suffered greater declines. In comparison, inflation-adjusted median income nationally fell by just 2.0 percent, declining by $962 from $48,163 in 2000 to $48,201 in 2006. The purchasing power of median household incomes is thought to have stagnated or perhaps fallen slightly in 2007. That is, most households in North Carolina and throughout the United States entered the current 2008 recession with less real income than they had in 2000.

North Carolina Job Growth Concentrated in Sectors of Economy Not Subject to Globalization

As throughout the country, the new jobs generated by North Carolina's economy are in industries that do not face import competition, are not easily offshored, and do not export. As an example, the state's job growth in *Health Care and Social Assistance* (114,400 new jobs), *State and Local Governments* (72,600 new jobs) and *Food Services and Drinking Places* (62,700 new jobs), was greater than all North Carolina net job growth (246,800) since 2001.[12]

New North Carolina Jobs Pay Less than Those Lost

Importantly, detailed compensation data from 2006 illustrates that the average (not median) annual compensation in North Carolina for jobs in *Health Care and Social Assistance* is $41,406, 29.9 percent less than the average North Carolina *Manufacturing* job which pays $59,516.[13] Jobs in North Carolina *State and Local Governments* pay $46,099, 22.9 percent less than *Manufacturing*; and jobs in *Food Services and Drinking Places* pay $15,348, 73.6 percent less than *Manufacturing*.[14] Consequently, between 2001 and 2006, North Carolina suffered a net loss of 6,364 jobs in sectors of its economy that paid better than the average North Carolina *Manufacturing* job of $58,516.

Very few industries with annual compensation higher than *Manufacturing* added jobs in North Carolina in recent years. Of those that did, few faced global competition or engaged in exporting, and many appear closely related to the recent debt-fueled boom in housing and national security.

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[8] Source is the U.S. Bureau of Labor Statistics (BLS). Analysis is by Dr. Charles W. McMillion, President and Chief Economist of MBG Information Services. Also see Appendix page A-11.

[9] The U.S. Census Bureau does not track population estimates for states on a monthly basis. Census reported that North Carolina's population grew from 8,049,077 on July 1, 2000 to 8,203,565 on July 1, 2001, a total increase of by 134,488. It also reported that North Carolina's population grew from 8,869,442 on July 1, 2006 to and 9,061,032 July 1, 2007, an increase of 191,590. Assuming population growth to be uniform on a monthly basis, we extrapolate North Carolina's population to be an estimated 8,142,021 on January 1, 2001 and an estimated 9,156,827 on January 1, 2008 using the Census figures above.

[10] Source is the U.S. Bureau of Labor Statistics (BLS). Analysis is by Dr. Charles W. McMillion, President and Chief Economist of MBG Information Services. Also see Appendix page A-12.

[11] Sources are the U.S. Dept. of Commerce and the U.S. Bureau of Labor Statistics (BLS). Analysis is by Dr. Charles W. McMillion, President and Chief Economist of MBG Information Services. Also see Appendix page A-13.

[12] Sources are the U.S. Dept. of Commerce and the U.S. Bureau of Labor Statistics (BLS). Analysis is by Dr. Charles W. McMillion, President and Chief Economist of MBG Information Services. Also see Appendix page A-14 and A-15.

[13] Id.

[14] Id.

National Manufacturing in Crisis Despite Record Debt Stimulus

Like manufacturing in North Carolina, U.S. manufacturing is mired in the midst of a crisis unprecedented since the Great Depression. Deeply flawed U.S. trade policy is the single most important root cause of the illness, undermining U.S. manufacturing competitiveness on a global basis.

Absent a national U.S. trade policy, U.S. manufacturing should be experiencing the best of times. Consider the following. Since 1950, U.S. Gross Domestic Production (GDP) has grown 550 percent in inflation-adjusted terms[16] while the U.S. population has doubled from 150 million to 300 million. Since 1990, U.S. GDP has grown by a little more than 50 percent in inflation-adjusted terms while the U.S. population has increased by 54 million.[17]

Moreover, the percentage of U.S. GDP used for consumer consumption has been above 70 percent in each of the previous six years.[18] Noting this figure, it should not be surprising that U.S. household and federal government debt has skyrocketed to unprecedented levels. Together, household and federal debt almost have doubled over the past seven years, soaring by $10.4 trillion to reach $23.1 trillion, an amount 64 percent larger than the entire Gross Domestic Product (GDP).[19] In comparison, total U.S. household and federal debt was 27 percent larger than GDP at the end of 2000. While the current record debt level is the basis for the debt crisis that now has plunged the United States into a new and possibly severe recession, in recent years it should have served as the greatest stimulus to U.S. manufacturing since the need for production to fight and win World War II.

Indicators of the National Manufacturing Crisis

Rather than showing strong gains in employment, capacity, output, and investment that normally would be expected in an economy experiencing the level of consumer stimulus that the United States has seen in recent years, the evidence instead demonstrates that U.S. manufacturing has slumped severely.

Last year, the United States ran a trade deficit of $709.5 billion, including a $499.9 billion deficit in manufacturing goods. The cumulative numbers even are more troubling. Since 1980, the cumulative U.S. trade deficit is $6.365 trillion, with manufacturing goods accounting for $5.249 trillion of that figure. Of even greater concern, almost 59 percent of that trade deficit in manufactured goods, $3.08 trillion, has been accumulated since 2001. Even the U.S. dollar's 24.2 percent fall against the U.S. Federal Reserve Board's price-adjusted "Broad" Index of world currency values since January 2002[20], has failed to increase U.S. exports enough materially to stanch the trade red ink.

The United States cannot continue to withstand the problems associated with a runaway trade deficit indefinitely. But don't just take AMTAC's word for it; others agree.

- "The present level of the current account deficit is enormous, it is unprecedented and I believe it is unsustainable."
  - Martin Feldstein, Professor of Economics at Harvard University, former Chairman, Reagan Council of Economic Advisers

- "[T]he United States must now attract almost $7 billion of capital from the rest of the world every working day to finance its current account deficit and its own foreign investment outflows."
  - C. Fred Bergsten, Director, Institute for International Economics

- "[O]ur trade deficit has greatly worsened, to the point that our country's "net worth," so to speak, is now being transferred abroad at an alarming rate. A perpetuation of this transfer will lead to major trouble."
  - Warren Buffet, Chairman, Berkshire Hathaway

This begs a question. How can it be that the United States, a country that possesses the most sophisticated industrial complex in the world, spends billions on research and development and product innovation, and has one the world's most advanced transportation, communication, and higher educational infrastructures, cannot run a trade surplus in virtually any manufacturing sector?

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[16] *See Appendix page A-18.*
[17] *See Appendix page A-19.*
[18] *See Appendix page A-20.*
[19] *See Appendix page A-21.*
[20] *See Appendix page A-22.*

2007 U.S. Trade Deficits in Key Manufacturing Sectors

- $ 115.7 billion in vehicles
- $ 105.1 billion in TVs, VCRs, and other electronics
- $ 69.9 billion in textiles and apparel
- $ 71.9 billion in computers and office machines
- $ 44.4 billion in "Advanced Technology Products"
- $ 29.8 billion in furniture and parts thereof
- $ 16.9 billion in iron and steel mill production
- **$ 490.9 billion in all manufactured goods**

Source: U.S. Bureau of the Census and MBG Information Services

The reason why the United States runs massive trade deficits in products where free trade theory posits America should have a comparative advantage is because foreign government intervention negates comparative advantage with value-added tax schemes, manipulated currencies, state sponsored subsidies, lack of protections for intellectual property rights, below market interest rates, and non performing loans that create an absolute advantage for their manufacturers.

These foreign predatory practices often are compounded by other factors such as pennies-per-hour labor, blatant disregard for environmental protection, lack of reasonable labor rights and workplace safety standards, and lack of basic benefits such as health care.

Consequently, it should surprise no one that other key economic health indicators for U.S. manufacturing show either an industry in distress or the weakest growth on record in the last six decades.

The U.S. manufacturing sector's inflation-adjusted capital expenditures for plant and equipment have plunged dramatically. The 2006 expenditure amount of $116.6 billion was smaller than each of the amounts for 1978 ($120.7 billion), 1979 (124.2 billion), and 1980 ($129.7 billion) respectively, the last three years of President Jimmy Carter's administration. Furthermore, it was considerably lower than the $156.8 billion expenditure peak in 1997.[20]

U.S. manufacturing capacity also has grown at a slower rate in the 2000s than in any of the past six decades. Growth was 50 percent for the 1950s, 63 percent for the 1960s, 38 percent for the 1970s, 25 percent for the 1980s, and 57 for the 1990s. Projected growth for the 2000s has fallen to a mere 16 percent or 1.6 percent per year.[21]

U.S. manufacturing output numbers tell a similar tale as output in the 2000s has grown at a slower rate than in any decade since the 1950s. Output growth was 69 percent for the 1950s, 54 percent for the 1960s, 40 percent for the 1970s, 23 percent for the 1980s, and 56 percent for the 1990s. Projected output growth for the 2000s is an anemic 13 percent or 1.3 percent per year.[22]

Finally, U.S. manufacturing employment collapsed between 2000 and 2003 and has yet to recover from the downturn. It now has plummeted to 13.6 million, its lowest level since May 1950 one month prior to the eruption of the Korean War.[23]

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[20] *See Appendix page A-23.*
[21] *See Appendix page A-24.*
[22] *See Appendix page A-25.*
[23] *See Appendix page A-26.*

U.S. Manufacturing Employment in Millions
Figures are for January of each year, not seasonally adjusted.

1950 – 13.122
1955 – 14.939
1960 – 15.559
1965 – 16.046
1970 – 18.254
1975 – 17.115
1980 – 19.132
1985 – 17.660
1990 – 17.648
1995 – 17.133
2000 – 17.179
2005 – 14.142
2008 – 13.638

Source: U.S. Bureau of Labor Statistics

Pollyannas arguing that little is wrong with U.S. manufacturing cite U.S. manufacturing productivity increases as the main reason for employment decline. Although U.S. manufacturing productivity indeed has doubled in recent years, U.S. demand for manufactured goods has tripled. Because U.S. growth in demand for manufactured goods exceeds growth in productivity, the United States should be adding manufacturing jobs instead of losing them if it were maintaining its market.

The real culprit in the loss of U.S. manufacturing jobs is the loss of markets and the loss of domestic markets to offshore producers in particular. Since 1980, U.S. demand for durable manufactured goods has soared nearly 400 percent. U.S. production of durable manufactured goods, however, only has grown by 40 percent of that total.[34] To further illustrate this point, U.S. Business and Industry Council Research Fellow Alan Tonelson conducted a study on import penetration rates for 114 high tech and other capital-intensive industries in the U.S. manufacturing sector. His research showed that import penetration rates for those industries jumped by 58.6 percent from a penetration rate of 21.4 percent in 1997 to 33.9 percent in 2006.[35]

New Trade Policy Needed to Restore Health of U.S. Manufacturing

Considering the undeniable plight of U.S. manufacturing, comprehensive new U.S. trade policy desperately are needed.

Require Reciprocity – U.S. trade policy must be redirected to its original roots in reciprocity, a concept clearly not present in the global economy's chief trade regime, the World Trade Organization (WTO). In the Uruguay Round, the United States agreed to lower or eliminate most barriers to its market for manufactured products without receiving commensurate market access from the rest of the world in return. Today, the average U.S. bound tariff for industrial products is 3 percent, while the average worldwide bound tariff is 30 percent.[36] Moreover, the average trade weighted U.S. industrial tariff stands at less than 1.7 percent.

In this regard, one significant problem is the ability of WTO members to self-designate themselves as "developing countries", a status granting them more favorable trading privileges than self-designated "developed" countries such as the United States. The ability of WTO members to self-designate their country status must be eliminated and replaced with objective criteria that accurately measure a country's ability to compete in the global trading arena.

Take China for example. While it may be a developing country in many respects, it is an international superpower in terms of global trade. In both 2006 and 2007 China exported more manufacturing goods to the world than did the

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[34] *See Appendix page A-27.*
[35] *See USBIC Research Alert, New Data Show Import Growth Depressing U.S. Industrial Output; Advanced U.S. Manufacturers Keep Losing Ground in Home Market*, by Alan Tonelson and Sarah Linden, January 8, 2008.
[36] Statement of Senator Charles Grassley at Senate Finance Hearing on WTO negotiations 10/27/2005.

United States.[27] Yet under the current WTO regime, China is allowed to maintain high tariff walls and other substantial non-tariff barriers to market access as a self-designated "developing country".

The ongoing Doha Round negotiations only further would exacerbate the lack of reciprocity afforded to U.S. producers. The Doha Round's Non-Agricultural Market Access (NAMA) text grants numerous exemptions to developing countries such as that contained in the Hong Kong Declaration's paragraph 14, *"Take fully into account the special needs and interests of developing countries, including through less than full reciprocity in reduction commitments."* The NAMA Chairman's July 2007 text states, "There is almost unanimous support that a simple Swiss formula with two coefficients should be adopted." Finally, for developed countries such as the United States, the maximum industrial tariff allowed proposed in the current NAMA negotiations is to be between 6 and 9 percent. In contrast, developing countries such as China will be allowed a tariff ceiling that would fall between 19 and 23 percent.

Offset the VAT Border Tax Disadvantage – Currently, 149 countries, accounting for approximately 95 percent of all U.S. trade, utilize a border-adjusted, value-added (VAT) tax system implemented at average rate of 15.4 percent. This tax often is among a country's most significant revenue sources to pay for such expenditures as nationalized health care and other vital government services.

Countries utilizing value-added tax systems impose those taxes on the cost of an import plus all shipping, handling, insurance and tariff expenses. They also rebate any VAT paid on a domestically produced good that is exported. Meanwhile, the United States neither rebates the taxes paid by a producer upon the export of a good nor imposes a significant tax burden on imports.

Consequently, goods produced in VAT countries have a built-in price advantage over their U.S. counterparts. Producers in VAT countries often are able to export goods at a price that deducts the U.S. equivalent of payroll and other taxes that are used to pay for social security, unemployment insurance, and health care costs. U.S. producers not only pay those U.S. taxes in the process of manufacturing domestically produced goods, they also are forced to pay them in other countries the moment a U.S. export is slapped with a VAT. AMTAC estimates that border-adjusted VAT schemes disadvantaged U.S. producers and service providers by a staggering $420 billion in 2006.

Ordinarily, a VAT would be viewed as an impermissible export subsidy under current trade rules. Unfortunately, in the years following World War II, the United States agreed to a loophole under the old General Agreement on Tariffs and Trade (GATT) the exempted VAT subsidies. Since allowing that loophole, use of the VAT grew from just France to almost the rest of the world, 149 countries. And as one would expect, VAT rates often have risen as tariff rates have fallen, creating a constant, but less visible barrier to U.S. exports. For the European Union (EU), the average barrier to U.S. exports has remained nearly constant at 23.8 percent since 1968.[28] Although the average EU tariff has dropped from 10.4 percent in 1968 to 4.4 percent in 2006, the average EU VAT has risen from 13.4 percent to 19.4 percent.

Last year, Congressmen Bill Pascrell (D-NJ), Duncan Hunter (R-CA), Mike Michaud (D-ME), and Walter Jones (R-NC) introduced H.R. 2890, the Border Tax Equity Act, to offset the VAT disadvantage to U.S. producers and service providers. North Carolina Congresswoman Sue Myrick (R) also is among the 15 total (7 Democrats and 8 Republicans) House members currently sponsoring the bill. H.R. 2890's swift enactment is a key to restoring U.S. manufacturing health.

Make Currency Manipulation an Actionable Subsidy – U.S. congressional and executive inaction against blatant currency manipulation by China is inexcusable. For years that country has pegged the value of its currency, the yuan, to the U.S. dollar at an artificially low rate. Factoring inflation, the value of the yuan has risen in value by less than 5 percent against the U.S. dollar since its peg was "loosened" to a basket of currencies in 2005. This policy has enabled China to simultaneously lower the cost of its exports and raise substantial barriers to imports.

Since 2001, the year China joined the WTO, the U.S. merchandise trade deficit with that country has exploded from around $80 billion to a staggering $256 billion in 2007.[29] The cumulative U.S. trade deficit with China during that same time period for manufactured goods was a staggering $1.2 trillion!

The United States imported $313.6 billion in manufactured goods from China in 2007. If, for example, China were undervaluing its currency by 35 percent, a figure not unreasonable to many experts, it would amount to a subsidy of nearly $110 billion to Chinese manufacturing exporters. With subsidies like this, its should surprise no one that less

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[27] *See Appendix page A-28.*
[28] *See Appendix page A-29.*
[29] *See Appendix page A-30.*

productive and efficient Chinese manufacturers can ship their products halfway around the world to the United States and still undercut the prices of their U.S. competitors.

Congressmen Tim Ryan (D-OH) and Duncan Hunter (R-CA) have introduced H.R. 2942, the Currency Reform for Fair Trade Act of 2007, to discourage currency manipulation by China, Japan, and other countries. U.S. Representatives Howard Coble (R), Robin Hayes (R), Walter Jones (R), Sue Myrick (R), and Heath Shuler (D) from North Carolina are among the 42 Democrats and 31 Republicans (73 House members total) sponsoring the bill.

H.R. 2942's strongest deterrent is a provision that would make currency manipulation an actionable subsidy under U.S. countervailing duty (CVD) law. Enactment of this legislation is imperative if the United States is to reduce its manufacturing and trade policy competitiveness gap with China, Japan and others.

Separate Trade Enforcement from the Office of the U.S. Trade Representative – It is unreasonable to expect that an office who on one hand is charged with negotiating trade agreements with other countries to then be able to turn around and impartially punish them when they run afoul of U.S. trade law. The conflicts of interest inherently are too great. As such, all enforcement of U.S. trade law should be separated from the Office of the U.S. Trade Representative (USTR).

A separate U.S. governmental entity should be set up as an independent agency or in another cabinet-level department, such as the U.S. Department of Commerce, to enforce U.S. trade law. This body would be charged with aggressively pursuing dumping, subsidy and intellectual property rights violation cases within the U.S. judicial and regulatory system and at the WTO. The anti-competitive dumping and illegal subsidy practices revealed in recent cases against China (the case on coated free sheet paper is a good example) should provide enough work to keep any enforcement agency busy for years.

Also as part of this reform, the U.S. government should reduce the cost and barriers to U.S. manufacturers attempting to bring trade enforcement cases. Presently, anti-dumping and CVD cases often cost millions for U.S. manufacturers to prosecute effectively. Even after making such a financial commitment, a favorable outcome is not guaranteed. In addition, U.S. manufacturers in a product's supply chain often have almost no access to trade law remedies due to a lack of standing. Only the assemblers of the final product and/or its workers, i.e. a union, usually effectively have standing to file a case. These costs and barriers deter the filing of many legitimate trade cases. The United States should consider adopting reforms to mimic the European Union where manufacturers would submit data indicating a likelihood of dumping or CVD infraction and the government then would investigate them and render a decision.

Stop Negotiating FTAs With Countries That Cannot Buy Finished U.S. Goods – Finally, the United States should stop negotiating free trade agreements with countries or economic regions that either are unwilling or unable to buy finished U.S. goods at the same rate they export to the United States.

Flawed U.S. free trade agreements demonstrably have fueled the U.S. trade deficit. Measuring U.S. government data for domestic exports[30] minus imports for consumption,[31] the U.S. trade deficit with our free trade partners has skyrocketed since 1989 from $13.55 billion to a whopping $187.84 billion in 2007.[32] With just Canada and Mexico between 1994 and 2007, the United States ran a cumulative trade deficit in manufacturing goods of $397.6 billion, a merchandise trade deficit of $1.071 trillion, and a current account deficit in goods and services of $942.2 billion.

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[30] Domestic Exports are defined as exports of domestic merchandise include commodities which are grown, produced or manufactured in the United States, and commodities of foreign origin which have been changed in the United States, including U.S. Foreign Trade Zones, or which have been enhanced in value by further manufacture in the United States.
[31] Imports for Consumption measure the merchandise that has physically cleared Customs either entering consumption channels immediately or entering after withdrawal from bonded warehouses under Customs custody or from Foreign Trade Zones.
[32] See Appendix page A-31.

U.S. Trade Deficits with FTA Partners 1989-2007

1989 (Israel + Canada): -$13,549,305,466
1990 (Israel + Canada): -$13,395,009,866
1991 (Israel + Canada): -$12,206,751,399
1992 (Israel + Canada): -$15,179,629,034
1993 (Israel + Canada): -$19,086,192,601
1994 (Israel, Canada, Mexico): -$25,429,626,643
1995 (Israel, Canada, Mexico): -$49,369,883,070
1996 (Israel, Canada, Mexico): -$59,021,526,324
1997 (Israel, Canada, Mexico): -$52,183,393,917
1998 (Israel, Canada, Mexico): -$57,504,788,445
1999 (Israel, Canada, Mexico): -$83,674,235,409
2000 (Israel, Canada, Mexico): -$114,509,613,664
2001 (Israel, Canada, Mexico): -$119,007,897,734
2002 (Israel, Canada, Mexico, Jordan): -$123,197,746,864
2003 (Israel, Canada, Mexico, Jordan): -$137,750,076,889
2004 (Israel, Canada, Mexico, Jordan, Singapore, Chile): -$162,306,487,366
2005 (Israel, Canada, Mexico, Jordan, Singapore, Chile, Australia): -$174,084,390,236
2006 (Israel, Canada, Mexico, Jordan, Singapore, Chile, Australia, Morocco): -$189,415,360,242
2007 (Israel, Canada, Mexico, Jordan, Singapore, Chile, Australia, Morocco, El Salvador, Honduras, Nicaragua, Guatemala, Bahrain): -$187,643,239,265

Source: U.S. International Trade Commission

Instead of seeking out negotiating partners in small or developing countries, the United States should be targeting agreements or economic alliances with countries that have lucrative consumption markets and a settled rule of law. Japan or the European Union would be examples of two good candidates. These trade partners both have sufficient large populations and high standards of living to buy sizeable quantities of U.S. exports if a good free trade agreement were negotiated and properly enforced.

Conclusion

Despite the hardships it has faced, the health of U.S. manufacturing quickly can be restored if the United States fixes its broken trade policy. Weak and inefficient U.S. manufacturers closed their doors years ago. Only the strongest and most efficient U.S. manufacturers have been able to survive in such a hostile competitive atmosphere. These companies will be well placed to ramp up new investment, reclaim lost market share, and add employment if the U.S. government removes trade policy obstacles impeding their success.

The American Manufacturing Trade Action Coalition is a lobbying organization representing domestic manufacturers. Our mission is to preserve and create American manufacturing jobs through the establishment of trade policy and other measures necessary for the U.S. manufacturing sector to stabilize and grow.

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Appendix

U.S. Bureau of Labor Statistics MSA Definitions for North Carolina

11700 Asheville, NC Metropolitan Statistical Area
Principal City: Asheville
Counties: Buncombe County, Haywood County, Henderson County, Madison County

15500 Burlington, NC Metropolitan Statistical Area
Principal City: Burlington
Counties: Alamance County

16740 Charlotte-Gastonia-Concord, NC-SC Metropolitan Statistical Area
Principal Cities: Charlotte, NC; Gastonia, NC; Concord, NC; Rock Hill, SC
Counties: Anson County, NC; Cabarrus County, NC; Gaston County, NC; Mecklenburg County, NC; Union County, NC; York County, SC

20500 Durham, NC Metropolitan Statistical Area
Principal City: Durham
Counties: Chatham County, Durham County, Orange County, Person County

22180 Fayetteville, NC Metropolitan Statistical Area
Principal City: Fayetteville
Counties: Cumberland County, Hoke County

24660 Greensboro-High Point, NC Metropolitan Statistical Area
Principal Cities: Greensboro, High Point
Counties: Guilford County, Randolph County, Rockingham County

24780 Greenville, NC Metropolitan Statistical Area
Principal Cities: Greenville
Counties: Greene County, Pitt County

25860 Hickory-Lenoir-Morganton, NC Metropolitan Statistical Area
Principal Cities: Hickory, Lenoir, Morganton
Counties: Alexander County, Burke County, Caldwell County, Catawba County

39580 Raleigh-Cary, NC Metropolitan Statistical Area
Principal Cities: Raleigh, Cary
Counties: Franklin County, Johnston County, Wake County

40580 Rocky Mount, NC Metropolitan Statistical Area
Principal City: Rocky Mount
Counties: Edgecombe County, Nash County

48900 Wilmington, NC Metropolitan Statistical Area
Principal City: Wilmington
Counties: Brunswick County, New Hanover County, Pender County

49180 Winston-Salem, NC Metropolitan Statistical Area
Principal City: Winston-Salem
Counties: Davie County, Forsyth County, Stokes County, Yadkin County

North Carolina Manufacturing Employment Gain/Loss by Sector

Manufacturing Sector	January 2001	January 2006	Gain/(Loss)	Percent
Food Manufacturing 311	80,780	83,808	2,980	3.7
Beverage & Tobacco Manufacturing 312	19,880	15,708	(4,380)	(22.8)
Textile Mills 313	181,780	58,908	(82,880)	(61.8)
Textile Product Mills 314	18,580	9,308	(9,280)	(50.3)
Apparel 315	42,180	15,708	(26,480)	(62.7)
Wood Products 321	29,180	23,808	(5,280)	(17.8)
Paper Manufacturing 322**	22,199	18,727	(3,442)	(15.5)
Printing & Related Support Activities 323	17,880	15,508	(2,380)	(12.8)
Chemical Manufacturing 325	46,180	41,108	(5,080)	(10.8)
Plastics & Rubber Products 326	41,880	33,808	(7,880)	(18.8)
Nonmetallic Mineral Product Mfg 327**	21,814	17,995	(4,019)	(18.8)
Primary Metal Manufacturing 331**	8,271	8,054	(217)	(2.6)
Fabricated Metal Product Manufacturing 332	45,180	40,308	(4,880)	(10.8)
Machinery Manufacturing 333	39,780	33,308	(6,580)	(16.4)
Computer and Electronic Product Manufacturing 334	80,380	61,408	(18,180)	(31.8)
Electrical Equipment, Appliance, & Component Manufacturing 335	41,280	24,408	(16,880)	(40.8)
Transportation Equipment Manufacturing 336	36,180	33,708	(2,480)	(6.8)
Furniture and Related Product Manufacturing 337	77,380	48,708	(28,680)	(37.8)
Miscellaneous Manufacturing 339**	18,830	16,008	(1,821)	(10.8)

**Data only through September 2007

Source: U.S. Bureau of Labor Statistics and the Quarterly Census on Employment and Wages

Capital Expenditures for Plant and Equipment
by Individual Manufacturing Sector in North Carolina

Inflation-adjusted figures are adjusted to the year 2006

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Food Manufacturing 311		
1997	$250,608,000	1.3451	$337,241,908
1998	$247,661,000	1.3356	$330,725,393
1999	$333,680,000	1.3218	$341,168,864
2000	$344,332,000	1	$344,332,000
2001	$256,255,000	0.9768	$250,238,901
2002	$309,735,000	0.9568	$287,283,653
2003	$244,670,000	0.9398	$229,940,866
2004	$305,190,000	0.9138	$278,824,325
2005	$212,673,000	0.885	$276,892,805
2006	$354,568,000	0.8579	$304,161,314
	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
Year	**Beverage & Tobacco Manufacturing 312**		
1997	$341,696,000	1.3451	$356,133,874
1998	$149,997,000	1.3356	$155,466,699
1999	$165,283,000	1.3218	$160,866,169
2000	$126,306,000	1	$126,306,000
2001	$138,412,000	0.9768	$132,243,358
2002	$165,028,000	0.9568	$158,875,804
2003	$157,669,000	0.9398	$170,371,328
2004	$220,543,000	0.9138	$295,168,865
2005	$336,171,000	0.885	$297,911,338
2006	$260,991,000	0.8579	$229,276,819
	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
Year	**Textile Mills 313**		
1997	$611,244,000	1.3451	$850,264,838
1998	$709,218,000	1.3356	$797,371,379
1999	$752,171,000	1.3218	$768,968,328
2000	$859,688,000	1	$859,688,000
2001	$520,669,000	0.9768	$508,479,559
2002	$350,157,000	0.9568	$345,668,367
2003	$262,808,000	0.9398	$246,706,618
2004	$180,202,000	0.9138	$164,632,947
2005	$188,811,000	0.885	$165,327,735
2006	$177,165,000	0.8579	$152,007,012

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Textile Product Mills 314		
1997	$69,875,800	1.0481	$91,439,568
1998	$71,780,800	1.0368	$80,829,748
1999	$75,125,800	1.0219	$76,785,790
2000	$83,894,800	1	$83,894,800
2001	$40,490,800	0.9768	$39,542,934
2002	$48,481,800	0.9698	$46,912,868
2003	$27,562,800	0.9398	$25,821,564
2004	$40,920,800	0.9136	$37,382,734
2005	$80,489,800	0.885	$44,868,380
2006	$86,225,800	0.8579	$39,742,218
	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
Year	**Apparel 315**		
1997	$134,219,000	1.0481	$140,673,742
1998	$116,267,000	1.0368	$120,561,648
1999	$151,700,000	1.0219	$155,019,125
2000	$135,534,000	1	$135,534,000
2001	$115,766,000	0.9768	$113,060,814
2002	$74,598,000	0.9698	$71,809,128
2003	$58,217,000	0.9398	$55,852,137
2004	$50,503,000	0.9136	$46,860,341
2005	$52,962,000	0.885	$46,871,370
2006	$31,402,000	0.8579	$27,137,660
	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
Year	**Wood Products 321**		
1997	$200,437,000	1.0481	$210,222,329
1998	$231,158,000	1.0368	$239,613,869
1999	$301,180,000	1.0219	$307,748,724
2000	$186,117,000	1	$186,117,000
2001	$80,578,000	0.9768	$81,629,322
2002	$114,353,000	0.9698	$109,756,809
2003	$91,775,000	0.9398	$86,269,148
2004	$151,413,000	0.9136	$138,313,837
2005	$160,660,000	0.885	$142,241,755
2006	$176,328,000	0.8579	$151,271,791

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Paper Manufacturing 322		
1997	$368,378,000	1.1051	$407,060,033
1998	$328,907,000	1.0308	$340,844,899
1999	$169,352,000	1.0219	$173,043,874
2000	$264,767,000	1	$264,767,000
2001	$230,408,000	0.9768	$225,026,843
2002	$180,748,000	0.9808	$176,361,338
2003	$204,475,000	0.9358	$192,165,805
2004	$155,881,000	0.9136	$142,412,862
2005	$143,113,000	0.885	$126,664,005
2006	$238,749,000	0.8979	$219,403,838

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Petroleum & Related Support Activities 221		
1997	$128,918,000	1.0401	$135,118,859
1998	$140,360,000	1.0308	$145,521,018
1999	$132,992,000	1.0219	$135,891,228
2000	$158,228,000	1	$158,228,000
2001	$127,092,000	0.9768	$124,118,647
2002	$95,452,000	0.9508	$91,624,429
2003	$127,258,000	0.9308	$118,573,764
2004	$95,108,000	0.9138	$86,868,842
2005	$118,225,000	0.865	$102,658,125
2006	$109,161,000	0.8579	$85,828,122

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Chemical Manufacturing 325		
1997	$587,889,000	1.0451	$614,149,489
1998	$677,783,000	1.0308	$698,583,083
1999	$1,685,197,000	1.0219	$1,724,599,985
2000	$786,753,000	1	$786,753,000
2001	$869,666,000	0.9768	$678,377,660
2002	$823,488,000	0.9508	$786,981,380
2003	$870,472,000	0.9308	$810,088,586
2004	$616,125,000	0.9136	$562,591,680
2005	$648,144,000	0.885	$571,607,640
2006	$746,466,000	0.8979	$648,398,318

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Plastics & Rubber Products 326		
1997	$358,902,000	1.0451	$377,213,268
1998	$408,307,000	1.0368	$430,141,238
1999	$378,173,000	1.0218	$386,417,171
2000	$413,107,000	1	$413,107,000
2001	$456,539,000	0.9766	$445,847,456
2002	$375,784,000	0.9888	$380,877,483
2003	$361,012,000	0.9308	$339,335,668
2004	$329,094,000	0.9139	$292,457,678
2005	$357,756,000	0.865	$343,164,660
2006	$360,881,000	0.8979	$336,809,443

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Nonmetallic Mineral Product Mfg 327		
1997	$299,373,000	1.0451	$313,769,697
1998	$101,802,000	1.0368	$105,455,953
1999	$327,668,000	1.0218	$334,811,952
2000	$212,060,000	1	$212,060,000
2001	$311,918,000	0.9766	$469,838,719
2002	$139,639,000	0.9888	$134,217,412
2003	$200,338,000	0.9308	$161,668,534
2004	$160,648,000	0.9139	$146,877,868
2005	$188,832,000	0.865	$168,901,320
2006	$188,905,000	0.8979	$162,061,809

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Primary Metal Manufacturing 331		
1997	$67,404,000	1.0451	$70,846,102
1998	$96,717,000	1.0368	$98,782,842
1999	$88,882,000	1.0218	$87,830,488
2000	$58,011,000	1	$58,011,000
2001	$65,521,000	0.9766	$70,913,469
2002	$43,737,000	0.9888	$41,876,773
2003	$19,666,000	0.9308	$18,909,381
2004	$39,608,000	0.9139	$36,213,277
2005	$52,331,000	0.865	$46,312,835
2006	$114,818,000	0.8979	$86,560,646

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Fabricated Metal Product Manufacturing 332		
1997	$242,804,000	1.0481	$254,262,771
1998	$290,928,000	1.0368	$301,168,719
1999	$272,111,000	1.0218	$278,043,620
2000	$276,199,000	1	$276,199,000
2001	$248,559,000	0.9766	$242,772,617
2002	$212,043,000	0.9668	$205,018,871
2003	$186,138,000	0.9336	$173,802,892
2004	$221,048,000	0.9136	$201,950,368
2005	$210,501,000	0.865	$182,073,365
2006	$218,318,000	0.8579	$184,826,858

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Machinery Manufacturing 333		
1997	$303,027,000	1.0481	$317,602,899
1998	$308,448,000	1.0368	$311,436,104
1999	$318,628,000	1.0218	$325,716,407
2000	$322,573,000	1	$322,573,000
2001	$242,698,000	0.9766	$237,019,843
2002	$198,308,000	0.9668	$191,788,140
2003	$152,621,000	0.9336	$142,521,179
2004	$166,718,000	0.9136	$152,313,565
2005	$206,141,000	0.865	$162,434,765
2006	$171,305,000	0.8579	$146,962,860

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Computer and Electronic Product Manufacturing 334		
1997	$290,304,000	1.0481	$304,351,478
1998	$246,217,000	1.0368	$255,229,542
1999	$744,951,000	1.0218	$761,199,652
2000	$837,288,000	1	$837,288,000
2001	$395,621,000	0.9766	$386,364,769
2002	$443,900,000	0.9668	$429,055,229
2003	$352,638,000	0.9336	$312,939,152
2004	$397,888,000	0.9136	$189,838,828
2005	$277,098,000	0.865	$345,229,869
2006	$432,944,000	0.8579	$371,422,858

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Electrical Equipment, Appliance, & Component Manufacturing 335		
1997	$218,948,000	1.0451	$230,108,307
1998	$238,227,000	1.0388	$248,848,108
1999	$352,059,000	1.0219	$359,713,458
2000	$261,453,000	1	$261,453,000
2001	$233,162,000	0.9768	$227,706,609
2002	$192,690,000	0.9698	$186,943,662
2003	$197,643,000	0.9358	$185,744,851
2004	$125,541,000	0.9136	$114,694,258
2005	$130,798,000	0.885	$115,787,115
2006	$166,307,000	0.8379	$140,858,875

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Transportation Equipment Manufacturing 336		
1997	$348,023,000	1.0451	$259,852,908
1998	$291,054,000	1.0388	$301,885,844
1999	$254,640,000	1.0219	$260,191,152
2000	$399,735,000	1	$399,735,000
2001	$706,689,000	0.9768	$690,152,477
2002	$357,068,000	0.9698	$371,519,364
2003	$365,698,000	0.9358	$341,804,329
2004	$231,863,000	0.9136	$230,102,837
2005	$418,244,000	0.885	$363,865,849
2006	$394,611,000	0.8379	$330,129,357

Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Furniture and Related Product Manufacturing 337		
1997	$148,313,000	1.0451	$155,484,855
1998	$151,318,000	1.0388	$157,862,168
1999	$172,250,000	1.0219	$176,047,888
2000	$162,909,000	1	$162,909,000
2001	$139,573,000	0.9768	$136,306,862
2002	$147,398,000	0.9698	$141,473,960
2003	$80,339,000	0.9358	$75,200,592
2004	$76,008,000	0.9136	$69,443,809
2005	$72,958,000	0.885	$64,568,715
2006	$72,438,000	0.8379	$62,148,418

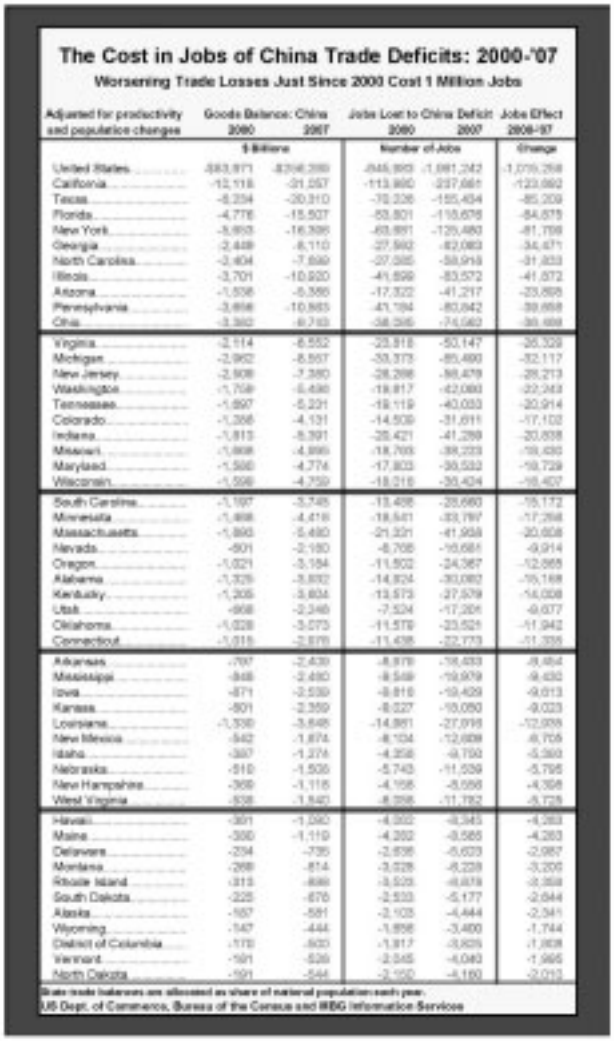
Year	Nominal Capital Expenditures for Plant and Equipment	Inflation Adjusted Multiplier	Inflation-Adjusted Capital Expenditures for Plant and Equipment
	Miscellaneous Manufacturing 339		
1997	$96,068,000	1.0481	$100,668,871
1998	$89,448,000	1.0308	$92,763,261
1999	$104,260,000	1.0219	$106,535,833
2000	$100,957,000	1	$100,957,000
2001	$75,828,000	0.9768	$74,061,872
2002	$81,891,000	0.9698	$79,407,822
2003	$65,671,000	0.9358	$61,905,568
2004	$129,115,000	0.9136	$117,959,404
2005	$90,908,000	0.885	$80,448,908
2006	$100,348,000	0.8379	$86,068,949

Source: U.S. Census Bureau Annual Survey of Manufactures (ASM) and STATS Indiana.

The Recent Jobs Record in the States

Rank	(States: 1,000 of jobs)	—— January of Each Year —— 2001	2007	2008	Change: 2008/2007 1,000	(PERCENT)	Change: 2008/2001 1,000	(PERCENT)
1	Michigan	4,511.7	4,186.2	4,139.0	-47.2	-1.1%	-372.7	-8.3%
2	Ohio	5,488.3	5,324.2	5,320.1	-4.1	-0.1%	-168.2	-3.1%
3	Massachusetts	3,317.0	3,199.5	3,221.8	23.4	0.7%	-95.1	-2.9%
4	Illinois	5,906.2	5,845.2	5,881.2	36.0	0.7%	-25.0	-0.4%
5	Connecticut	1,666.2	1,666.5	1,679.2	12.7	0.8%	14.0	0.8%
6	New York	8,523.9	8,532.9	8,616.2	85.3	1.0%	94.3	1.1%
7	Vermont	301.7	305.8	305.7	-0.1	-0.0%	4.0	1.3%
8	Wisconsin	2,770.7	2,814.4	2,809.0	-5.4	-0.2%	38.3	1.4%
9	Indiana	2,901.7	2,921.6	2,941.9	20.3	0.7%	40.2	1.4%
10	Maine	588.5	596.1	597.3	0.8	0.2%	8.5	1.4%
11	Louisiana	1,897.3	1,876.6	1,826.3	-46.8	-2.6%	-28.0	-1.5%
12	Mississippi	1,128.8	1,139.4	1,147.3	8.9	0.8%	18.5	1.6%
13	Pennsylvania	5,613.1	5,679.4	5,707.3	27.8	0.5%	94.2	1.7%
14	Rhode Island	468.4	481.8	476.4	-5.5	-1.1%	8.0	1.7%
15	Missouri	2,668.3	2,729.0	2,743.7	14.7	0.5%	55.4	2.1%
16	New Jersey	3,922.5	3,993.6	4,008.0	14.4	0.4%	85.5	2.2%
17	Kansas	1,330.1	1,341.2	1,362.5	21.3	1.6%	32.4	2.4%
18	Minnesota	2,648.0	2,711.4	2,725.9	14.5	0.5%	77.1	2.9%
19	Tennessee	2,673.4	2,744.9	2,754.8	9.9	0.4%	81.4	3.0%
20	West Virginia	719.0	740.6	741.2	0.7	0.1%	22.2	3.1%
21	New Hampshire	622.1	632.0	641.6	9.6	1.5%	19.5	3.1%
22	California	14,513.5	14,939.0	14,975.1	37.1	0.2%	461.6	3.2%
23	Iowa	1,648.7	1,482.6	1,490.2	10.6	0.7%	48.5	3.2%
24	Kentucky	1,701.5	1,830.6	1,854.9	24.1	1.3%	63.4	3.5%
25	Delaware	410.9	425.8	427.8	1.8	0.4%	16.7	4.1%
	US Totals	132,469	137,100	138,056	948	0.7%	5,587	4.2%
26	Arkansas	1,139.8	1,184.9	1,190.3	5.4	0.5%	50.5	4.4%
27	Colorado	2,210.5	2,282.6	2,314.8	52.0	2.3%	104.1	4.7%
28	Georgia	3,931.3	4,084.3	4,136.8	41.6	1.0%	204.6	5.2%
29	Alabama	1,894.4	1,974.9	1,997.5	22.6	1.1%	103.1	5.4%
30	Nebraska	901.3	936.1	956.2	16.1	1.0%	54.9	6.1%
31	Oklahoma	1,487.5	1,529.8	1,566.0	39.2	1.9%	90.5	6.2%
32	North Carolina	3,884.8	4,053.7	4,131.8	77.9	1.9%	246.8	6.4%
33	Maryland	2,418.0	2,580.8	2,671.8	20.8	0.8%	166.6	6.9%
34	South Carolina	1,808.5	1,864.3	1,931.5	27.2	1.4%	123.0	6.8%
35	Virginia	3,472.6	3,699.8	3,716.2	16.4	0.5%	245.6	7.1%
36	Oregon	1,665.1	1,686.3	1,707.8	19.6	1.2%	114.8	7.2%
	District of Columbia	640.7	681.6	691.0	9.2	1.3%	50.3	7.9%
37	South Dakota	369.2	391.9	399.0	7.1	1.8%	29.8	8.1%
38	Washington	2,670.9	2,843.3	2,909.4	66.1	2.3%	238.5	8.9%
39	Texas	9,423.5	10,199.1	10,374.8	288.7	2.7%	951.3	10.1%
40	North Dakota	322.5	348.5	356.2	7.7	2.2%	33.7	10.4%
41	New Mexico	738.8	824.4	828.8	4.4	0.5%	89.0	12.0%
42	Alaska	264.8	296.3	298.4	2.1	0.7%	33.6	12.7%
43	Florida	7,096.7	8,010.9	8,008.0	-2.8	-0.0%	911.3	12.8%
44	Hawaii	548.9	614.9	621.9	7.0	1.1%	73.0	13.3%
45	Montana	379.8	427.0	434.4	7.4	1.7%	54.6	14.4%
46	Idaho	549.3	628.2	636.4	8.2	1.3%	87.1	15.9%
47	Utah	1,088.2	1,219.2	1,251.0	31.8	2.6%	181.8	17.0%
48	Arizona	2,239.4	2,630.7	2,647.1	16.4	0.6%	407.7	18.2%
49	Wyoming	253.1	279.1	283.5	6.4	2.1%	55.4	21.6%
50	Nevada	1,033.8	1,289.2	1,277.4	9.2	0.7%	243.8	23.6%

US Dept. of Labor, BLS and WBG Information Services



The Cost in Jobs of China Trade Deficits: 2000-'07

Worsening Trade Losses Just Since 2000 Cost 1 Million Jobs

Adjusted for productivity and population changes	Goods Balance: China 2000	2007	Jobs Lost to China Deficit 2000	2007	Jobs Effect 2000-'07
	$ Billions		Number of Jobs		Change
United States	-$83,971	-$256,289	-845,993	-1,981,242	-1,070,258
California	-12,118	-31,057	-113,990	-237,661	-123,692
Texas	-6,234	-20,310	-70,226	-155,434	-85,209
Florida	-4,776	-15,507	-53,801	-118,676	-64,875
New York	-5,853	-16,396	-65,891	-125,480	-81,708
Georgia	-2,449	-8,110	-27,582	-62,053	-34,471
North Carolina	-3,404	-7,699	-27,585	-58,918	-31,333
Illinois	-3,701	-10,920	-41,699	-83,572	-41,872
Arizona	-1,506	-5,356	-17,322	-41,217	-23,895
Pennsylvania	-3,656	-10,985	-41,194	-80,842	-39,648
Ohio	-3,392	-9,793	-38,206	-74,982	-36,776
Virginia	-2,114	-6,552	-23,818	-50,147	-26,329
Michigan	-2,962	-8,557	-33,373	-65,490	-32,117
New Jersey	-2,908	-7,380	-28,298	-56,479	-28,213
Washington	-1,709	-5,490	-19,817	-42,080	-22,263
Tennessee	-1,897	-5,231	-19,119	-40,033	-20,914
Colorado	-1,356	-4,131	-14,509	-31,611	-17,102
Indiana	-1,813	-5,391	-25,421	-41,259	-20,838
Missouri	-1,868	-4,899	-18,769	-38,233	-19,464
Maryland	-1,566	-4,774	-17,803	-36,533	-18,729
Wisconsin	-1,556	-4,759	-18,316	-36,424	-18,407
South Carolina	-1,107	-3,745	-13,468	-28,680	-15,172
Minnesota	-1,868	-4,418	-18,541	-33,797	-17,256
Massachusetts	-1,893	-5,480	-21,321	-41,958	-20,638
Nevada	-901	-2,180	-8,706	-16,681	-8,914
Oregon	-1,021	-3,184	-11,502	-24,367	-12,865
Alabama	-1,326	-3,892	-14,824	-30,082	-15,168
Kentucky	-1,205	-3,834	-13,573	-27,579	-14,006
Utah	-668	-2,346	-7,524	-17,201	-9,677
Oklahoma	-1,028	-3,073	-11,578	-23,521	-11,942
Connecticut	-1,015	-2,870	-11,436	-22,773	-11,336
Arkansas	-707	-2,439	-8,978	-18,653	-9,674
Mississippi	-848	-2,480	-9,549	-19,979	-10,430
Iowa	-871	-2,539	-9,816	-19,429	-9,613
Kansas	-801	-2,359	-9,027	-18,050	-9,023
Louisiana	-1,336	-3,648	-14,991	-27,919	-12,928
New Mexico	-542	-1,674	-6,104	-12,808	-6,705
Idaho	-397	-1,274	-4,358	-9,758	-5,399
Nebraska	-510	-1,536	-5,743	-11,539	-5,795
New Hampshire	-369	-1,116	-4,156	-8,556	-4,398
West Virginia	-538	-1,540	-8,398	-11,782	-5,725
Hawaii	-391	-1,040	-4,392	-8,345	-4,283
Maine	-330	-1,119	-4,202	-8,565	-4,363
Delaware	-234	-735	-2,636	-5,623	-2,987
Montana	-288	-814	-3,228	-6,228	-3,200
Rhode Island	-313	-886	-3,523	-6,878	-3,356
South Dakota	-225	-676	-2,533	-5,177	-2,644
Alaska	-167	-581	-2,103	-4,444	-2,341
Wyoming	-147	-444	-1,656	-3,400	-1,744
District of Columbia	-110	-303	-1,317	-3,029	-1,808
Vermont	-161	-526	-2,045	-4,040	-1,995
North Dakota	-161	-544	-2,100	-4,160	-2,061

Rate trade balances are allocated as share of national population each year.
US Dept. of Commerce, Bureau of the Census and IBEG Information Services

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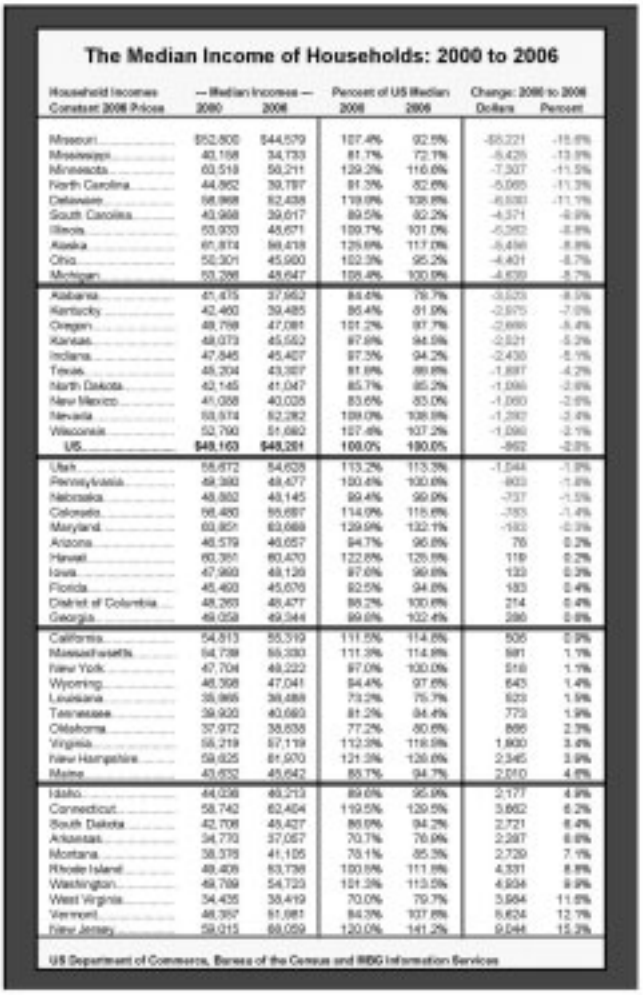

The Median Income of Households: 2000 to 2006

Household Incomes Constant 2006 Prices	— Median Incomes — 2000	2006	Percent of US Median 2000	2006	Change: 2000 to 2006 Dollars	Percent
Missouri	$52,800	$44,579	107.4%	92.5%	-$8,221	-15.6%
Mississippi	40,156	34,733	81.7%	72.1%	-5,425	-13.5%
Minnesota	60,519	56,211	123.2%	116.6%	-7,307	-11.5%
North Carolina	44,962	39,797	91.5%	82.6%	-5,065	-11.3%
Delaware	56,968	52,438	119.0%	108.8%	-6,530	-11.1%
South Carolina	43,968	39,617	89.5%	82.2%	-4,371	-9.9%
Illinois	53,933	48,671	109.7%	101.0%	-5,262	-8.8%
Alaska	61,874	56,418	125.9%	117.0%	-5,456	-8.8%
Ohio	52,301	45,900	102.3%	95.2%	-6,401	-8.7%
Michigan	53,286	48,647	108.4%	100.9%	-4,639	-8.7%
Alabama	41,475	37,952	84.4%	78.7%	-3,523	-8.5%
Kentucky	42,460	39,485	86.4%	81.9%	-2,975	-7.0%
Oregon	49,768	47,081	101.2%	97.7%	-2,688	-5.4%
Kansas	48,073	45,552	97.8%	94.5%	-2,521	-5.2%
Indiana	47,845	45,407	97.3%	94.2%	-2,438	-5.1%
Texas	45,204	43,307	91.9%	89.8%	-1,897	-4.2%
North Dakota	42,145	41,047	85.7%	85.2%	-1,098	-2.6%
New Mexico	41,058	40,026	83.5%	83.0%	-1,032	-2.5%
Nevada	53,974	52,282	109.8%	108.5%	-1,692	-3.1%
Wisconsin	52,790	51,682	107.4%	107.2%	-1,098	-2.1%
US	**$49,163**	**$48,201**	**100.0%**	**100.0%**	-962	-2.0%
Utah	55,572	54,628	113.2%	113.3%	-1,044	-1.9%
Pennsylvania	49,380	48,477	100.4%	100.6%	-903	-1.8%
Nebraska	48,882	48,145	99.4%	99.9%	-737	-1.5%
Colorado	56,480	55,687	114.9%	115.6%	-793	-1.4%
Maryland	63,851	63,068	129.9%	132.1%	-183	-0.3%
Arizona	46,579	46,657	94.7%	96.8%	78	0.2%
Hawaii	60,391	60,470	122.8%	125.5%	119	0.2%
Iowa	47,969	48,126	97.6%	99.8%	133	0.3%
Florida	45,460	45,676	92.5%	94.8%	193	0.4%
District of Columbia	48,263	48,477	98.2%	100.6%	214	0.4%
Georgia	49,058	49,344	99.8%	102.4%	286	0.6%
California	54,813	55,319	111.5%	114.8%	506	0.9%
Massachusetts	64,738	65,393	131.7%	135.7%	655	1.0%
New York	47,704	48,222	97.0%	100.0%	518	1.1%
Wyoming	46,368	47,041	94.4%	97.6%	643	1.4%
Louisiana	39,865	39,488	73.2%	75.7%	523	1.9%
Tennessee	39,920	40,693	81.2%	84.4%	773	1.9%
Oklahoma	37,972	38,838	77.2%	80.6%	866	2.3%
Virginia	55,219	57,119	112.3%	118.5%	1,900	3.4%
New Hampshire	59,025	61,970	121.3%	128.6%	2,945	3.9%
Maine	43,532	45,642	88.7%	94.7%	2,010	4.6%
Idaho	44,036	46,213	89.6%	95.9%	2,177	4.9%
Connecticut	58,742	62,404	119.5%	129.5%	3,662	6.2%
South Dakota	42,706	45,427	86.9%	94.2%	2,721	6.4%
Arkansas	34,770	37,057	70.7%	76.9%	2,287	6.6%
Montana	38,576	41,155	78.1%	85.3%	2,729	7.1%
Rhode Island	49,408	53,736	100.5%	111.5%	4,331	8.8%
Washington	49,769	54,723	101.3%	113.5%	4,954	9.9%
West Virginia	34,435	38,419	70.0%	79.7%	3,984	11.6%
Vermont	46,397	51,981	94.3%	107.8%	5,624	12.1%
New Jersey	59,015	68,059	120.0%	141.2%	9,044	15.3%

US Department of Commerce, Bureau of the Census and IRBG Information Services

Compensation in North Carolina: Replacing High Wage With Low Wage Jobs

Code	Industry	Avg Compensation 2001	Avg Compensation 2008	Compensation vs Wages 2001	Compensation vs Wages 2008	Change in jobs: 2001-08 Number	Change in jobs: 2001-08 Percent
01	**Farm wage and salary employment**	$19,988	$23,881	-68.1%	-69.8%	-3,602	-13.7%
02	**Nonfarm wage and salary employment**	39,038	46,144	-18.5%	-21.1%	291,988	4.9%
05	**Private wage and salary**	37,384	44,694	-17.7%	-23.6%	137,636	4.1%
100	**Forestry, fishing, related activities**	20,717	20,371	-54.4%	-54.8%	-630	-4.8%
101	Forestry and logging	28,717	30,188	-38.8%	-39.8%	-614	-15.8%
102	Fishing, hunting, and trapping	17,682	21,188	-61.1%	-63.8%	-220	-69.4%
103	Agriculture and forestry support	17,732	23,888	-61.0%	-69.0%	204	2.2%
200	**Mining**	66,248	76,206	21.6%	33.8%	-536	-11.8%
202	Mining (except oil and gas)	63,762	70,832	18.3%	36.4%	-120	-3.6%
300	**Utilities**	n/a	84,231	n/a	61.0%	-1,662	-11.3%
400	**Construction**	36,298	45,004	-19.7%	-23.0%	17,059	7.3%
401	Construction of buildings	43,472	53,447	-4.4%	-8.7%	1,810	2.6%
402	Heavy and civil engineering construction	40,814	49,382	-13.2%	-16.6%	-2,112	-7.1%
403	Specialty trade contractors	35,529	40,978	-21.8%	-32.0%	18,261	12.6%
500	**Manufacturing**	49,449	58,818	0.0%	0.0%	-148,215	-26.7%
516	Durable goods manufacturing	48,764	60,663	7.3%	3.7%	-60,008	-18.7%
511	Wood product manufacturing	34,207	41,182	-24.7%	-29.7%	-936	-3.2%
512	Nonmetallic mineral product manufacturing	45,940	54,227	-2.2%	-7.2%	-3,940	-16.3%
513	Primary metal manufacturing	46,978	70,078	15.0%	19.0%	337	4.4%
514	Fabricated metal product manufacturing	42,529	51,749	-8.2%	-11.6%	-1,704	-4.1%
515	Machinery manufacturing	47,870	63,112	8.3%	7.9%	-8,300	-14.1%
516	Computer/electronic product manufacturing	63,889	104,723	64.9%	78.0%	-57,320	-38.8%
517	Electrical equipment/appliance manufacturing	49,271	63,618	8.3%	8.0%	-12,941	-33.8%
518	Motor vehicles, bodies/trailers/parts mfgrng	53,960	66,389	18.8%	12.4%	-388	-1.4%
519	Other transportation equipment manufacturing	46,757	71,794	7.9%	22.7%	1,979	31.4%
521	Furniture and related product manufacturing	30,706	37,978	-32.4%	-35.1%	-18,336	-29.6%
522	Miscellaneous manufacturing	40,778	57,818	-18.3%	-1.0%	-1,360	-5.1%
530	Nondurable goods manufacturing	42,062	56,378	-7.8%	-4.2%	-88,268	-24.8%
531	Food manufacturing	30,583	39,998	-32.7%	-35.6%	410	0.8%
532	Beverage and tobacco product manufacturing	69,404	104,864	52.8%	78.8%	-3,720	-26.3%
533	Textile mills	32,726	40,563	-28.0%	-31.5%	-43,224	-48.4%
534	Textile product mills	31,437	37,562	-32.8%	-36.6%	-8,832	-48.3%
535	Apparel manufacturing	39,968	44,248	-24.0%	-24.4%	-18,218	-48.8%
536	Leather and allied product manufacturing	33,298	39,012	-28.7%	-42.3%	-440	-36.0%
537	Paper manufacturing	51,182	62,974	12.0%	8.1%	-5,710	-12.4%
538	Printing and related support activities	40,979	49,542	-8.0%	-15.3%	-1,750	-18.0%
539	Petroleum and coal products manufacturing	61,429	77,008	13.1%	31.6%	-106	-19.7%
541	Chemical manufacturing	70,088	86,143	84.2%	82.6%	-5,186	-12.8%
542	Plastics and rubber products manufacturing	44,757	52,404	-1.8%	-10.4%	-2,318	-6.3%
600	**Wholesale trade**	50,525	62,956	11.6%	7.0%	17,995	11.1%
700	**Retail trade**	24,299	27,867	-48.6%	-52.7%	8,251	1.8%
701	Motor vehicle and parts dealers	39,756	45,745	-12.5%	-25.2%	4,409	7.0%
702	Furniture and home furnishings stores	30,002	31,886	-34.0%	-46.5%	2,422	13.3%
703	Electronics and appliance stores	41,407	39,823	-6.8%	-22.3%	-656	-5.3%
704	Building material and garden supply stores	28,394	33,343	-33.3%	-43.0%	8,144	13.1%
705	Food and beverage stores	19,183	21,227	-68.0%	-63.0%	-13,104	-13.7%
706	Health and personal care stores	26,943	33,233	-46.7%	-43.2%	4,606	17.1%
707	Gasoline stations	17,717	19,554	-81.0%	-80.6%	495	1.7%
708	Clothing and clothing accessories stores	17,407	17,711	-81.8%	-89.7%	2,787	7.4%
709	Sporting goods, hobby, book and music stores	17,887	19,888	-80.4%	-88.0%	12	0.1%
711	General merchandise stores	18,087	22,302	-80.2%	-81.0%	8,918	18.4%
712	Miscellaneous store retailers	23,908	25,271	-47.4%	-58.0%	-4,400	-14.0%
713	Nonstore retailers	30,598	39,967	-32.0%	-33.4%	-1,541	-14.1%
800	**Transportation and warehousing**	43,188	48,083	-9.0%	-17.9%	-4,008	-3.2%
801	Air transportation	60,091	66,883	32.2%	-4.9%	-5,040	-31.8%
802	Rail transportation	77,827	87,253	71.2%	48.1%	111	4.4%
803	Water transportation	296,084	169,886	508.1%	61.0%	399	148.9%
804	Truck transportation	41,378	46,938	-9.0%	-16.4%	-2,402	-4.8%
805	Transit and ground passenger transportation	26,175	32,152	-42.4%	-45.1%	565	12.5%
806	Pipeline transportation	66,161	85,788	48.6%	63.7%	-22	-19.4%

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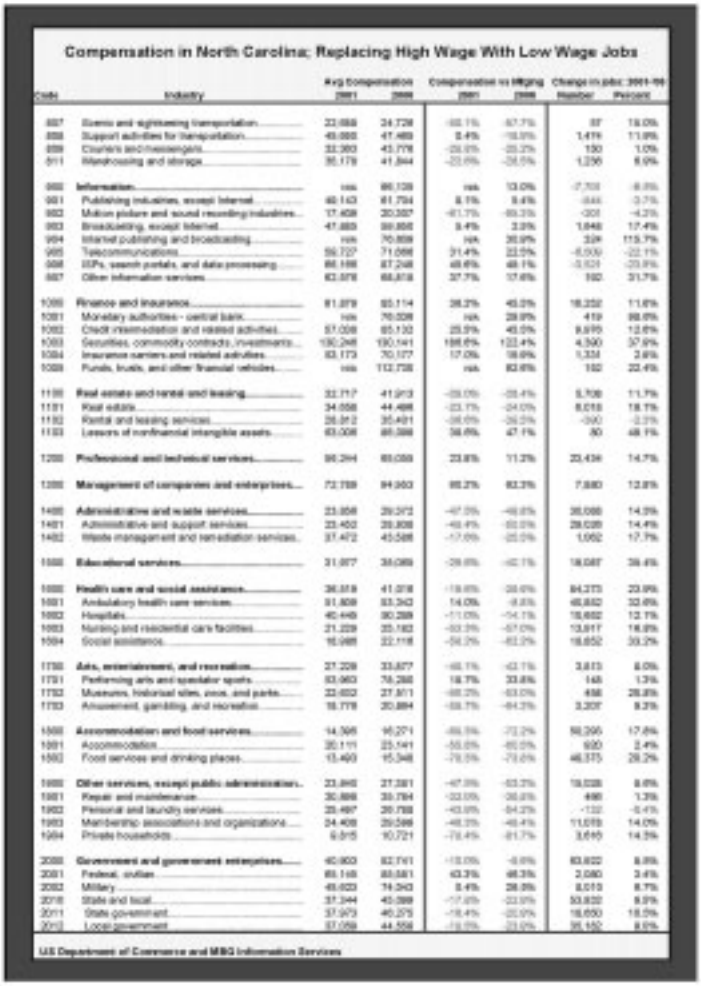


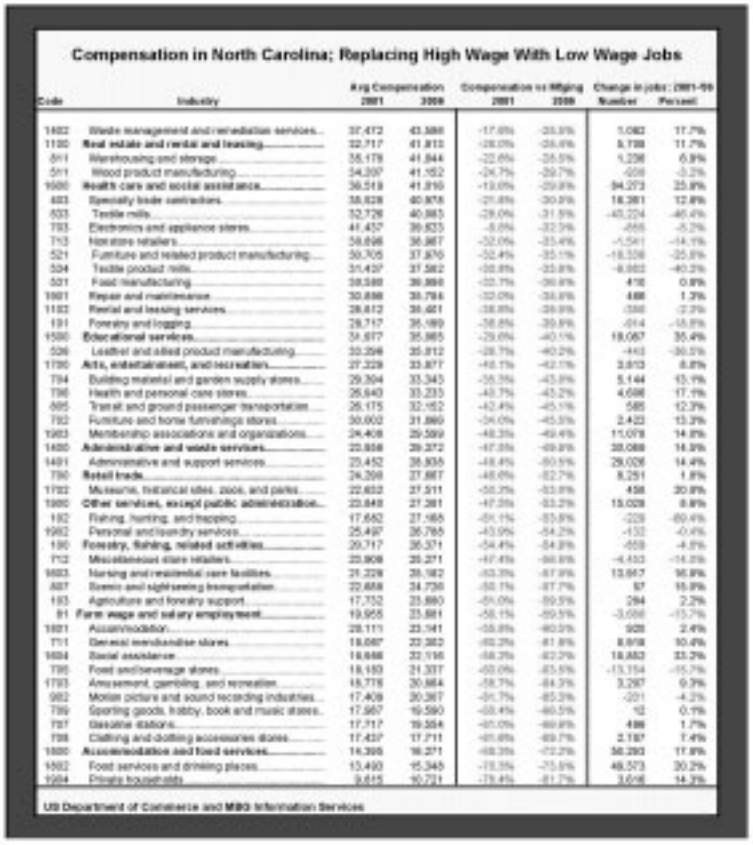
Compensation in North Carolina: Replacing High Wage With Low Wage Jobs

Code	Industry	Avg Compensation 2001	Avg Compensation 2008	Compensation vs Mfging 2001	Compensation vs Mfging 2008	Change in jobs: 2001-08 Number	Change in jobs: 2001-08 Percent
487	Scenic and sightseeing transportation	22,668	24,728	-62.1%	-57.7%	87	19.0%
488	Support activities for transportation	40,660	47,469	8.4%	-10.3%	1,471	11.9%
492	Couriers and messengers	32,360	43,778	-29.8%	-23.2%	150	1.0%
493	Warehousing and storage	36,179	41,844	-23.6%	-24.5%	1,256	8.9%
510	**Information**	n/a	66,139	n/a	13.0%	-7,700	-8.8%
511	Publishing industries, except Internet	49,143	61,794	8.1%	9.4%	-844	-3.7%
512	Motion picture and sound recording industries	17,408	20,307	-61.7%	-69.3%	-305	-4.2%
513	Broadcasting, except Internet	47,883	59,856	5.4%	2.3%	1,648	17.4%
514	Internet publishing and broadcasting	n/a	70,809	n/a	30.9%	224	115.7%
515	Telecommunications	59,727	71,088	31.4%	22.5%	-6,909	-22.1%
516	ISPs, search portals, and data processing	66,188	87,248	48.6%	48.1%	-3,824	-23.8%
517	Other information services	62,978	66,818	37.7%	17.6%	192	31.7%
1000	**Finance and insurance**	61,979	93,114	38.2%	46.0%	18,232	11.6%
1001	Monetary authorities - central bank	n/a	76,028	n/a	28.9%	419	88.6%
1002	Credit intermediation and related activities	57,008	85,132	25.5%	45.0%	8,975	12.6%
1003	Securities, commodity contracts, investments	130,248	130,141	188.6%	122.4%	4,390	37.9%
1004	Insurance carriers and related activities	63,173	70,177	17.0%	18.9%	1,331	2.9%
1005	Funds, trusts, and other financial vehicles	n/a	112,738	n/a	83.6%	192	22.4%
1100	**Real estate and rental and leasing**	32,717	41,913	-39.0%	-39.4%	5,708	11.7%
1101	Real estate	34,558	44,498	-33.7%	-34.0%	8,018	18.7%
1102	Rental and leasing services	26,912	35,401	-38.0%	-39.5%	-940	-2.3%
1103	Lessors of nonfinancial intangible assets	63,008	66,398	36.6%	47.1%	80	66.1%
1200	**Professional and technical services**	56,264	69,059	23.8%	11.2%	23,434	14.7%
1300	**Management of companies and enterprises**	72,759	94,903	66.2%	62.3%	7,980	12.8%
1400	**Administrative and waste services**	23,858	29,972	-67.3%	-68.8%	35,088	14.3%
1401	Administrative and support services	23,452	29,808	-68.4%	-69.0%	29,028	14.4%
1402	Waste management and remediation services	37,472	45,588	-17.0%	-23.0%	1,062	17.7%
1500	**Educational services**	31,977	38,089	-39.8%	-42.1%	18,087	39.4%
1600	**Health care and social assistance**	36,518	41,018	-19.8%	-23.6%	84,273	23.9%
1601	Ambulatory health care services	51,809	63,343	14.0%	9.8%	40,832	32.6%
1602	Hospitals	40,449	50,288	-11.0%	-14.1%	19,602	12.1%
1603	Nursing and residential care facilities	21,229	25,193	-52.3%	-57.0%	13,917	16.8%
1604	Social assistance	18,988	22,118	-54.2%	-62.2%	18,852	39.2%
1700	**Arts, entertainment, and recreation**	27,228	33,877	-68.1%	-62.1%	3,813	8.0%
1701	Performing arts and spectator sports	53,063	76,268	18.7%	33.8%	148	1.3%
1702	Museums, historical sites, zoos, and parks	22,652	27,811	-68.2%	-63.0%	498	28.8%
1703	Amusement, gambling, and recreation	18,778	20,884	-68.7%	-64.3%	3,207	8.3%
1800	**Accommodation and food services**	14,396	16,271	-69.3%	-72.2%	56,295	17.6%
1801	Accommodation	20,111	23,141	-55.0%	-60.0%	920	2.4%
1802	Food services and drinking places	13,493	15,348	-76.5%	-73.6%	46,375	28.2%
1900	**Other services, except public administration**	23,845	27,281	-47.3%	-53.2%	19,038	8.6%
1901	Repair and maintenance	30,888	39,784	-32.0%	-36.8%	498	1.3%
1902	Personal and laundry services	25,497	29,758	-43.9%	-54.2%	-132	-0.4%
1903	Membership associations and organizations	24,408	29,598	-46.3%	-46.4%	11,019	14.0%
1904	Private households	9,815	10,721	-73.4%	-81.7%	3,645	14.3%
2000	**Government and government enterprises**	40,803	52,741	-13.0%	-6.8%	63,822	8.8%
2001	Federal, civilian	63,116	83,581	43.3%	48.3%	2,080	3.4%
2002	Military	49,623	74,243	8.4%	28.8%	8,013	8.7%
2010	State and local	37,344	45,089	-17.6%	-23.9%	53,832	8.9%
2011	State government	37,973	46,275	-16.4%	-23.9%	18,650	18.5%
2012	Local government	37,059	44,556	-19.0%	-23.0%	35,182	6.6%

US Department of Commerce and MBG Information Services

Compensation in North Carolina; Replacing High Wage With Low Wage Jobs

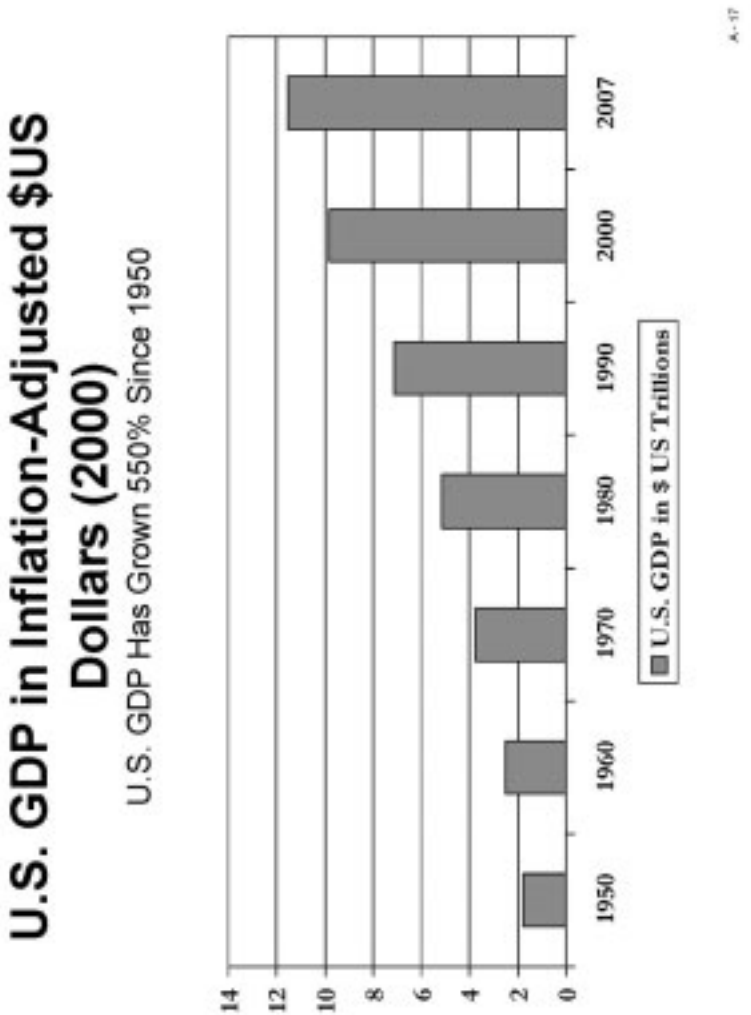
Code	Industry	Avg Compensation 2001	Avg Compensation 2009	Compensation vs Mfging 2001	Compensation vs Mfging 2009	Change in jobs: 2001-09 Number	Change in jobs: 2001-09 Percent
1003	Securities, commodity contracts, investments	$130,388	$130,141	188.6%	122.4%	4,380	37.8%
1005	Funds, trusts, and other financial vehicles	n/a	112,730	n/a	82.8%	152	22.4%
883	Water transportation	280,004	185,880	838.1%	81.9%	386	146.9%
516	Computer/electronic product manufacturing	65,895	184,723	84.6%	79.9%	-17,326	-29.8%
532	Beverage and tobacco product manufacturing	69,454	184,654	52.6%	76.8%	-3,733	-20.5%
886	Pipeline transportation	68,191	85,785	45.0%	63.7%	-22	-15.4%
541	Chemical manufacturing	78,099	85,143	54.2%	62.8%	-6,134	-12.8%
1300	Management of companies and enterprises	72,769	84,803	66.2%	62.3%	7,886	12.8%
380	Utilities	n/a	84,231	n/a	61.9%	-1,883	-11.3%
986	ISPs, search portals, and data processing	66,166	67,249	45.0%	49.1%	-3,521	-23.8%
882	Rail transportation	77,827	67,252	71.2%	49.1%	111	4.4%
1183	Lessors of nonfinancial intangible assets	60,009	66,399	38.6%	47.1%	66	49.1%
2001	Federal, civilian	68,148	65,581	43.3%	46.2%	2,080	3.4%
1002	Credit intermediation and related activities	57,038	65,132	26.9%	45.5%	8,978	12.8%
1000	Finance and insurance	61,879	65,114	38.2%	45.9%	16,252	11.8%
282	Mining (except oil and gas)	53,762	79,832	18.2%	39.4%	-139	-3.5%
1191	Performing arts and spectator sports	53,993	76,280	18.7%	33.8%	146	1.3%
280	Mining	55,248	76,265	21.6%	33.8%	-686	-11.8%
539	Petroleum and coal products manufacturing	58,425	77,936	13.1%	31.8%	-198	-15.7%
984	Internet publishing and broadcasting	n/a	76,880	n/a	30.8%	524	115.7%
1081	Monetary authorities - central bank	n/a	76,830	n/a	29.9%	419	90.8%
2002	Military	45,623	74,943	0.4%	26.5%	6,016	9.7%
518	Other transportation equipment manufacturing	68,787	71,784	7.3%	22.7%	1,978	31.4%
985	Telecommunications	68,727	71,660	31.4%	22.9%	-8,009	-22.1%
1004	Insurance carriers and related activities	65,173	70,177	17.0%	19.8%	1,331	2.8%
513	Primary metal manufacturing	68,678	70,078	16.0%	19.8%	337	6.4%
987	Other information services	62,678	68,915	37.1%	17.8%	182	31.7%
515	Motor vehicles, bodies/trailers/parts mfging	59,995	66,365	19.6%	15.4%	-589	-1.4%
980	Information	n/a	66,105	n/a	15.8%	-7,701	-9.5%
1200	Professional and technical services	56,314	60,855	22.8%	11.2%	23,424	14.7%
517	Electrical equipment/appliance manufacturing	49,211	60,516	6.3%	8.5%	-12,041	-35.8%
505	Machinery manufacturing	47,679	60,112	5.3%	7.9%	-5,599	-14.1%
686	Wholesale trade	50,625	62,950	11.6%	7.8%	17,993	11.7%
527	Paper manufacturing	55,182	62,874	12.6%	6.1%	-2,119	-12.6%
981	Publishing industries, except Internet	48,143	61,764	8.1%	5.4%	-944	-3.7%
510	Durable goods manufacturing	48,754	60,663	7.3%	5.7%	-69,009	-16.7%
983	Broadcasting, except Internet	47,888	59,960	5.4%	2.9%	1,648	17.4%
500	Manufacturing	45,449	56,516	0.0%	0.0%	-146,219	-20.7%
522	Miscellaneous manufacturing	49,779	57,818	-12.3%	-1.8%	-1,388	-8.1%
520	Nondurable goods manufacturing	42,042	56,378	-7.5%	-4.2%	-66,788	-24.8%
881	Air transportation	69,681	55,883	52.2%	-4.9%	-5,643	-31.8%
512	Nonmetallic mineral product manufacturing	45,843	54,327	0.2%	-7.2%	-3,648	-16.3%
481	Construction of buildings	43,472	53,447	-4.4%	-8.7%	1,516	2.8%
9581	Ambulatory health care services	56,809	53,342	14.0%	-8.8%	48,652	32.8%
2080	Government and government enterprises	40,903	52,741	-13.0%	-9.9%	80,922	6.5%
542	Plastics and rubber products manufacturing	46,797	52,434	-1.5%	-10.4%	-2,318	-6.3%
514	Fabricated metal product manufacturing	42,629	51,743	-8.2%	-11.8%	-1,769	-4.1%
9582	Hospitals	49,446	50,269	-11.0%	-14.1%	18,662	12.1%
536	Printing and related support activities	40,978	49,542	-9.6%	-15.3%	-1,758	-10.8%
482	Heavy and civil engineering construction	40,814	49,392	-10.2%	-15.8%	-2,712	-7.1%
884	Truck transportation	41,379	46,809	-9.0%	-19.4%	-2,432	-4.8%
880	Transportation and warehousing	43,158	46,853	-5.0%	-17.8%	-4,008	-3.2%
888	Support activities for transportation	45,858	47,485	0.4%	-16.9%	1,474	11.9%
2081	State government	37,973	46,275	-15.4%	-20.9%	18,656	10.5%
82	Nonfarm wage and salary employment	38,658	46,144	-14.3%	-21.1%	201,558	4.9%
2010	State and local	37,344	45,899	-17.0%	-22.8%	53,822	9.5%
480	Construction	38,398	46,834	-15.7%	-23.8%	17,088	7.3%
80	Private wage and salary	37,304	44,804	-17.7%	-25.9%	137,636	4.1%
2012	Local government	37,858	44,359	-19.0%	-23.9%	35,182	9.8%
1181	Real estate	34,658	44,486	-22.7%	-24.8%	8,018	19.1%
535	Apparel manufacturing	29,948	44,249	-34.0%	-24.4%	-18,374	-46.8%
888	Couriers and messengers	32,383	43,776	-28.8%	-26.2%	156	1.8%
781	Motor vehicle and parts dealers	38,788	43,745	-12.9%	-26.2%	4,489	7.8%

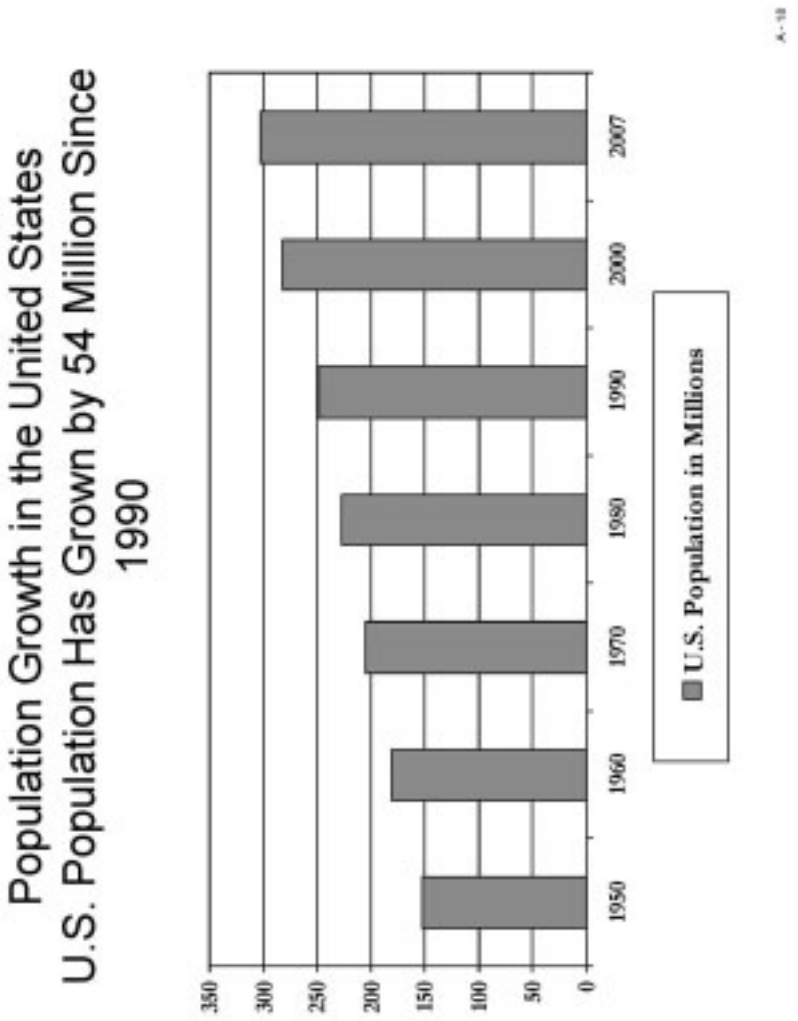


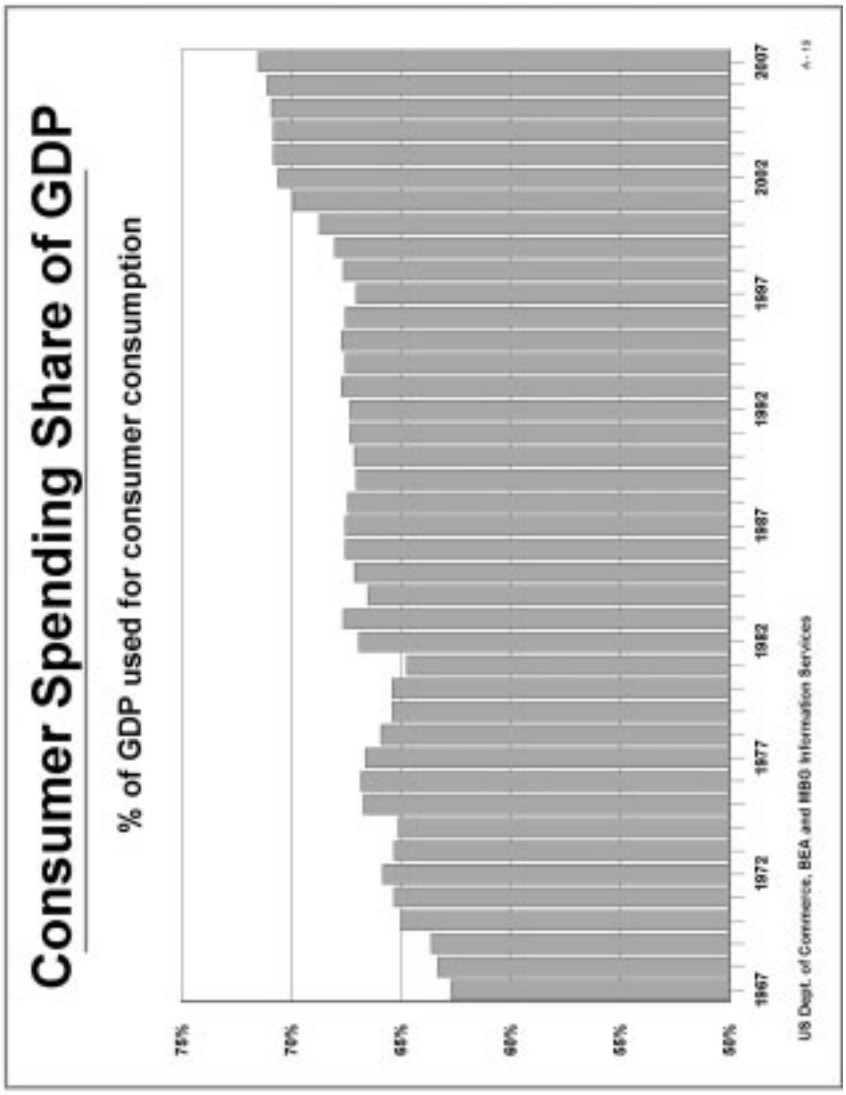
Compensation in North Carolina; Replacing High Wage With Low Wage Jobs

Code	Industry	Avg Compensation 2001	Avg Compensation 2009	Compensation vs Mfging 2001	Compensation vs Mfging 2009	Change in jobs: 2001-09 Number	Change in jobs: 2001-09 Percent
1562	Waste management and remediation services	37,472	43,388	-17.6%	-23.9%	5,082	17.7%
1100	**Real estate and rental and leasing**	32,717	41,813	-28.0%	-26.6%	5,708	11.7%
511	Warehousing and storage	35,178	41,944	-22.6%	-26.5%	1,236	6.9%
321	Wood product manufacturing	34,397	41,152	-24.7%	-29.7%	-609	-3.2%
1600	**Health care and social assistance**	36,518	41,310	-19.0%	-29.8%	94,273	25.8%
423	Specialty trade contractors	38,828	40,878	-21.8%	-30.9%	18,381	12.8%
533	Textile mills	32,726	40,983	-29.0%	-31.5%	-45,224	-46.4%
793	Electronics and appliance stores	41,457	39,823	-5.8%	-32.9%	-555	-5.2%
713	Nonstore retailers	38,696	36,987	-32.0%	-33.4%	-1,541	-14.1%
521	Furniture and related product manufacturing	30,705	37,976	-32.4%	-35.1%	-18,336	-25.8%
534	Textile product mills	31,437	37,382	-30.8%	-33.8%	-8,882	-40.3%
531	Food manufacturing	38,580	36,868	-32.7%	-36.8%	416	0.8%
1601	Repair and maintenance	30,898	36,784	-32.0%	-36.8%	488	1.3%
1183	Rental and leasing services	28,812	36,401	-38.8%	-36.9%	-386	-2.3%
191	Forestry and logging	28,717	36,189	-38.8%	-39.8%	-914	-15.8%
1500	**Educational services**	34,977	35,985	-29.6%	-40.1%	18,067	35.4%
526	Leather and allied product manufacturing	33,294	35,812	-28.7%	-40.2%	-443	-30.5%
1700	**Arts, entertainment, and recreation**	27,229	33,877	-48.1%	-42.1%	2,813	8.8%
784	Building material and garden supply stores	29,304	33,345	-55.5%	-43.9%	5,144	15.9%
786	Health and personal care stores	26,640	33,233	-48.7%	-45.2%	4,686	17.1%
485	Transit and ground passenger transportation	26,175	32,152	-42.4%	-45.1%	585	12.3%
782	Furniture and home furnishings stores	30,002	31,860	-54.0%	-45.5%	2,422	13.3%
1903	Membership associations and organizations	24,408	29,599	-48.3%	-49.4%	11,078	14.8%
1400	**Administrative and waste services**	25,858	29,372	-47.8%	-49.8%	38,088	14.5%
1401	Administrative and support services	25,452	28,805	-48.4%	-50.5%	29,026	14.4%
780	**Retail trade**	24,356	27,667	-48.6%	-52.7%	8,251	1.8%
1702	Museums, historical sites, zoos, and parks	22,653	27,511	-56.3%	-53.9%	458	20.8%
1900	**Other services, except public administration**	22,848	27,381	-47.3%	-53.2%	15,029	8.8%
182	Fishing, hunting, and trapping	17,662	27,165	-61.1%	-53.9%	-229	-60.4%
1902	Personal and laundry services	25,497	26,765	-43.0%	-54.2%	-132	-0.4%
190	**Forestry, fishing, related activities**	20,717	26,371	-54.4%	-54.8%	-659	-4.8%
712	Miscellaneous store retailers	23,806	25,271	-47.4%	-56.8%	-4,443	-14.5%
1603	Nursing and residential care facilities	21,228	25,182	-53.3%	-57.9%	13,647	16.8%
487	Scenic and sightseeing transportation	22,658	24,736	-50.1%	-57.7%	67	15.9%
183	Agriculture and forestry support	17,752	23,880	-61.0%	-59.5%	294	2.2%
81	**Farm wage and salary employment**	19,955	23,881	-58.1%	-59.5%	-3,686	-15.7%
1601	Accommodation	28,111	23,141	-55.8%	-60.3%	928	2.4%
711	General merchandise stores	18,087	22,382	-62.3%	-61.8%	8,918	10.4%
1604	Social assistance	18,668	22,196	-58.3%	-62.3%	18,883	33.2%
785	Food and beverage stores	18,193	21,337	-60.0%	-63.5%	-13,154	-16.7%
1703	Amusement, gambling, and recreation	18,778	20,864	-58.7%	-64.3%	3,297	9.3%
982	Motion picture and sound recording industries	17,409	20,367	-61.7%	-65.3%	-201	-4.2%
789	Sporting goods, hobby, book and music stores	17,957	19,590	-60.4%	-66.5%	12	0.1%
787	Gasoline stations	17,717	19,354	-61.0%	-66.8%	486	1.7%
788	Clothing and clothing accessories stores	17,437	17,711	-61.8%	-69.7%	2,187	7.4%
1800	**Accommodation and food services**	14,306	16,271	-68.3%	-72.2%	30,293	17.8%
1502	Food services and drinking places	13,493	15,345	-70.3%	-73.5%	49,573	30.2%
1984	Private households	9,615	10,721	-79.4%	-81.7%	3,016	14.3%

US Department of Commerce and MBO Information Services


U.S. GDP in Inflation-Adjusted $US Dollars (2000)
U.S. GDP Has Grown 550% Since 1950
14
12
10
8
6
4
2
0
1950
1960
1970
1980
1990
2000
2007
U.S. GDP in $ US Trillions


Population Growth in the United States
U.S. Population Has Grown by 54 Million Since 1990
350
300
250
200
150
100
50
0
1950
1960
1970
1980
1990
2000
2007
U.S. Population in Millions


Consumer Spending Share of GDP
% of GDP used for consumer consumption
75%
70%
65%
60%
55%
50%
1967
1972
1977
1982
1987
1992
1997
2002
2007
US Dept. of Commerce, BEA and HBO Information Services
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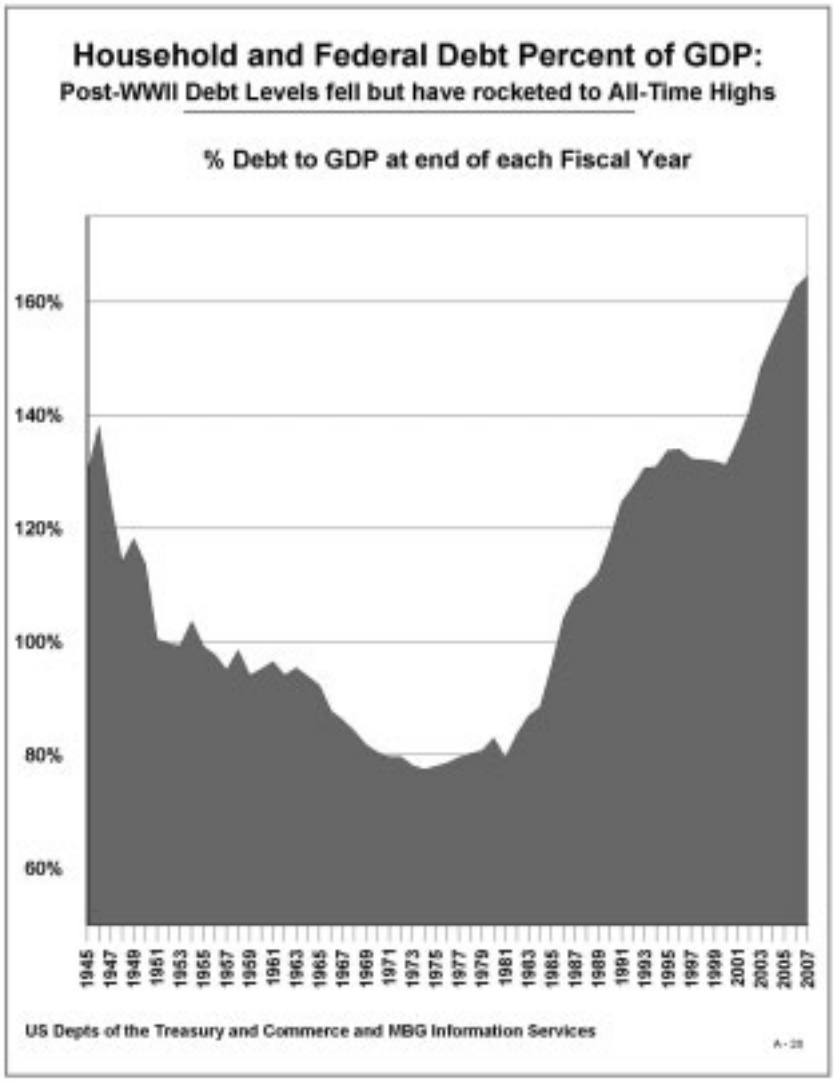
Household and Federal Debt Percent of GDP:
Post-WWII Debt Levels fell but have rocketed to All-Time Highs
% Debt to GDP at end of each Fiscal Year
160%
140%
120%
100%
80%
60%
1945
1947
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
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1981
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2003
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2007
US Depts of the Treasury and Commerce and MBG Information Services
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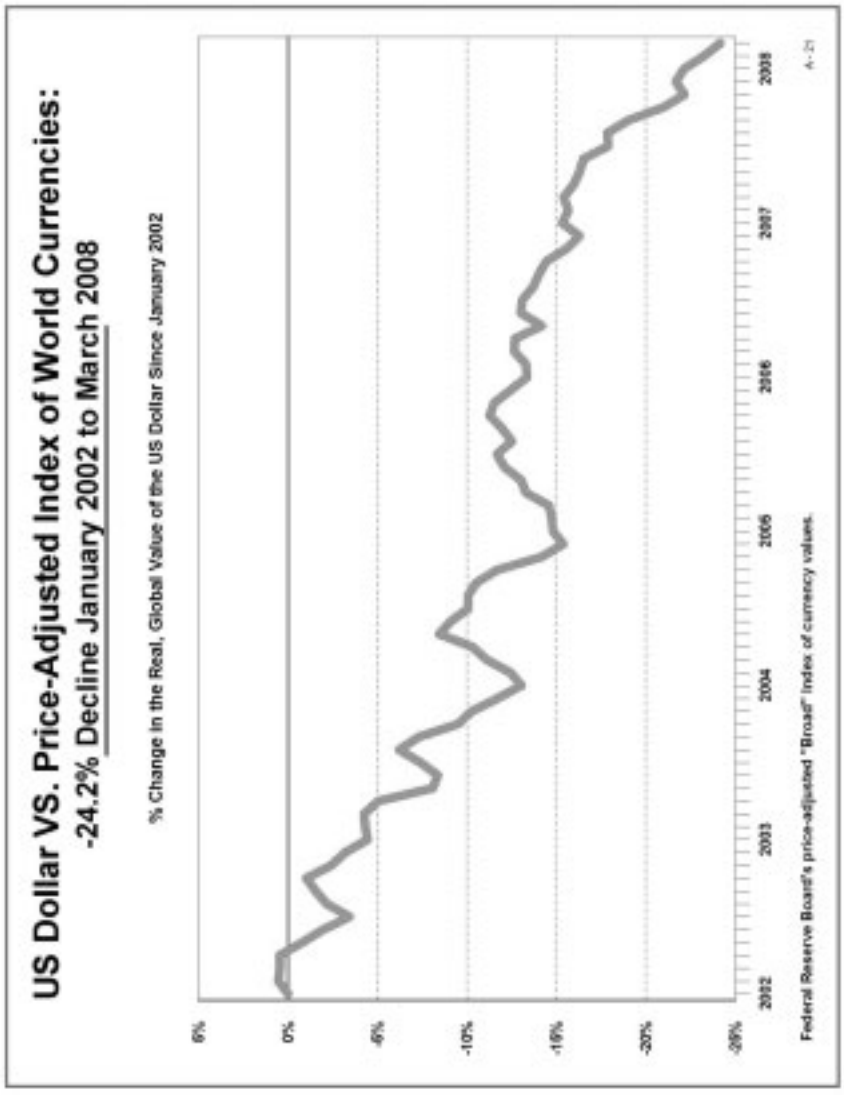
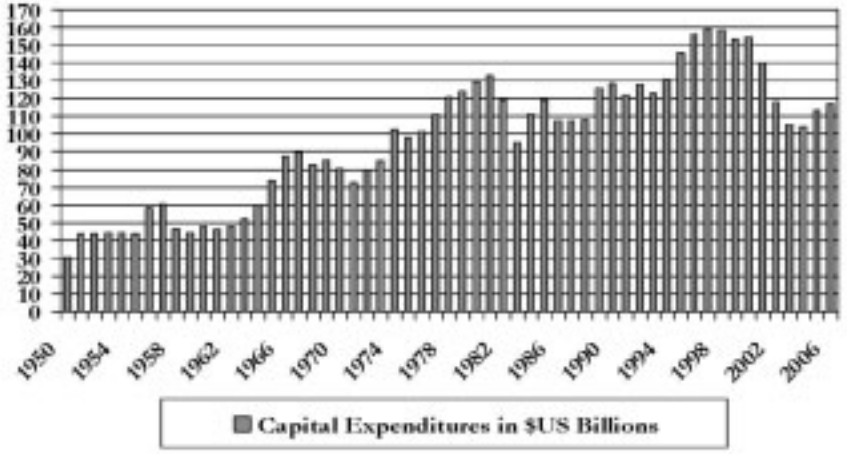

US Dollar VS. Price-Adjusted Index of World Currencies:
-24.2% Decline January 2002 to March 2008
% Change in the Real, Global Value of the US Dollar Since January 2002
6%
0%
-5%
-10%
-15%
-20%
-25%
2002
2003
2004
2005
2006
2007
2008
Federal Reserve Board's price-adjusted "Broad" index of currency values.

U.S. Manufacturing Capital Expenditures for Plant and Equipment in Inflation-Adjusted (2000) Dollars

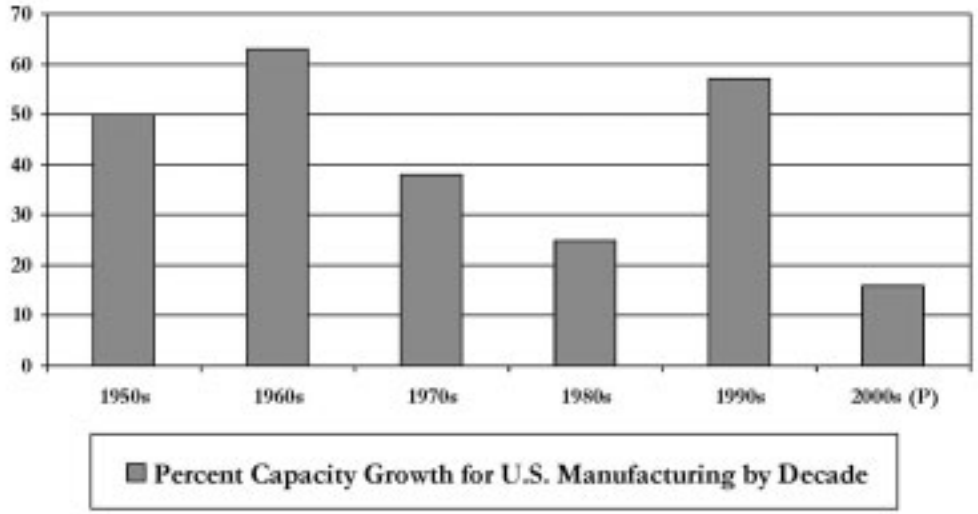
Data from 1950-1991 is for new capital expenditures only. Data from 1992-2006 is for both new and used capital expenditures. Used capital expenditures averaged 4.14 percent of all capital expenditures from 1992-1996.
Source: U.S. Census Bureau, Annual Survey of Manufactures data converted to chained (2000) dollars.



A - 22

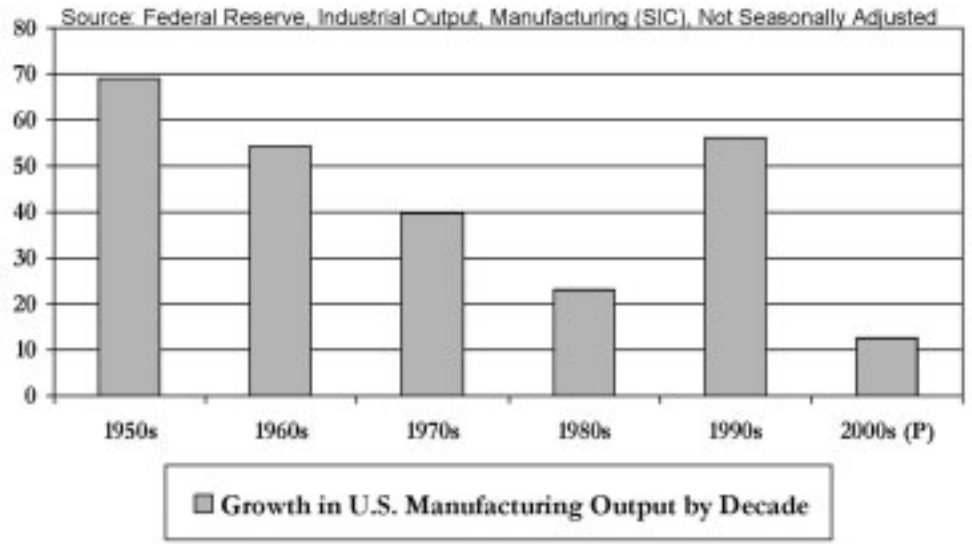
Percentage Growth in Manufacturing Capacity in the United States by Decade

Source: Federal Reserve Board, Industrial Capacity, Manufacturing (SIC), Not Seasonally Adjusted



A - 23

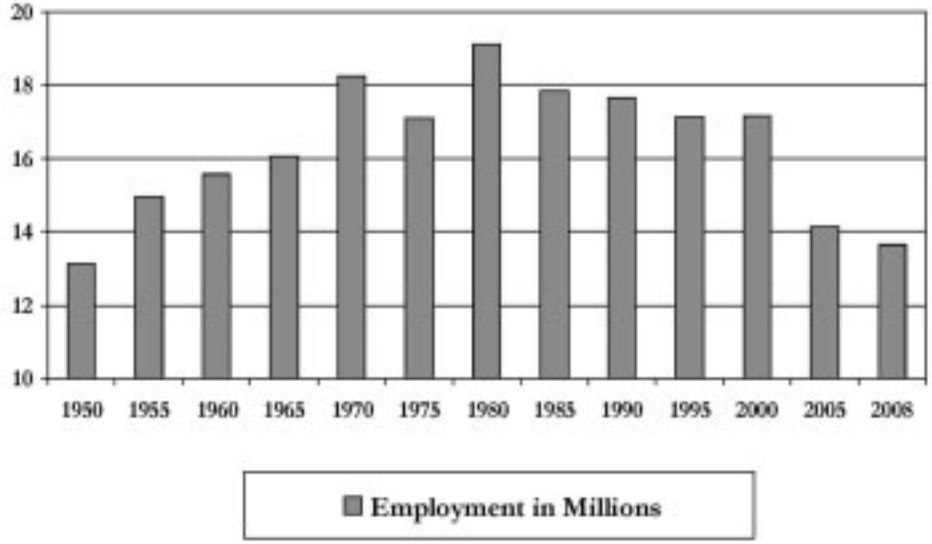
Growth in U.S. Manufacturing Output Slows



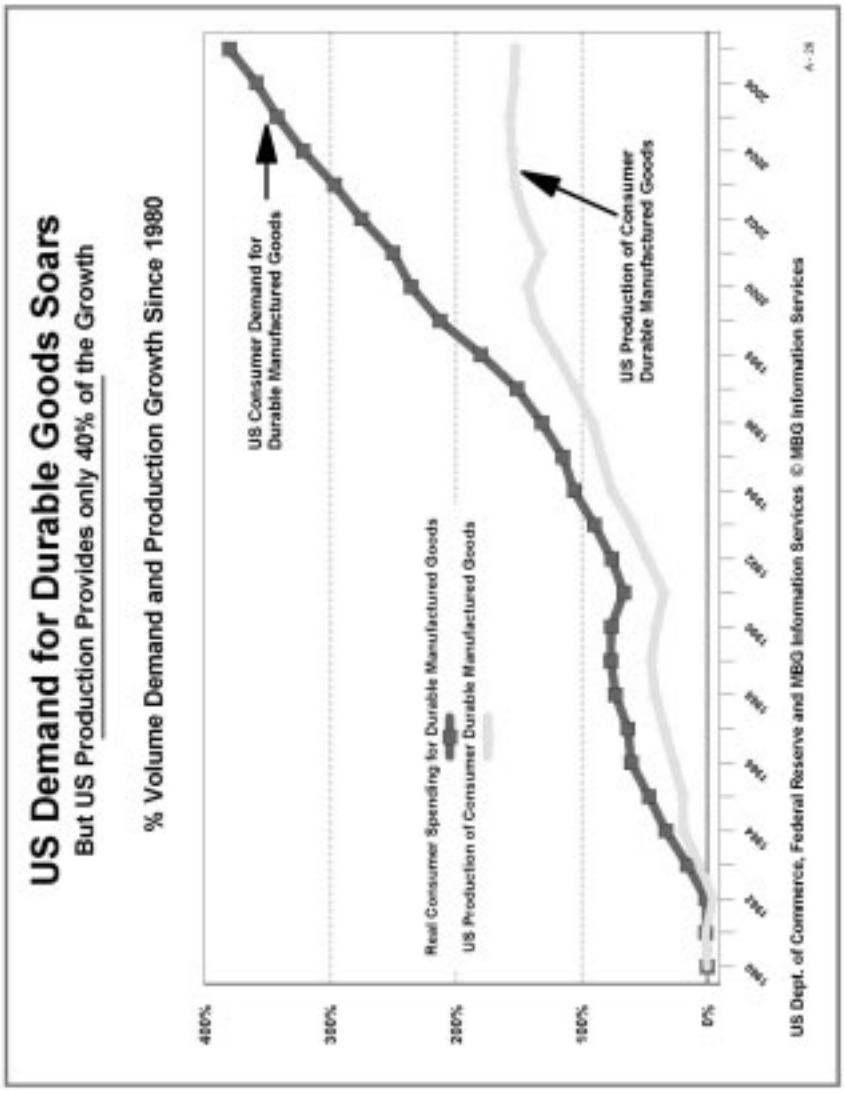
A - 24

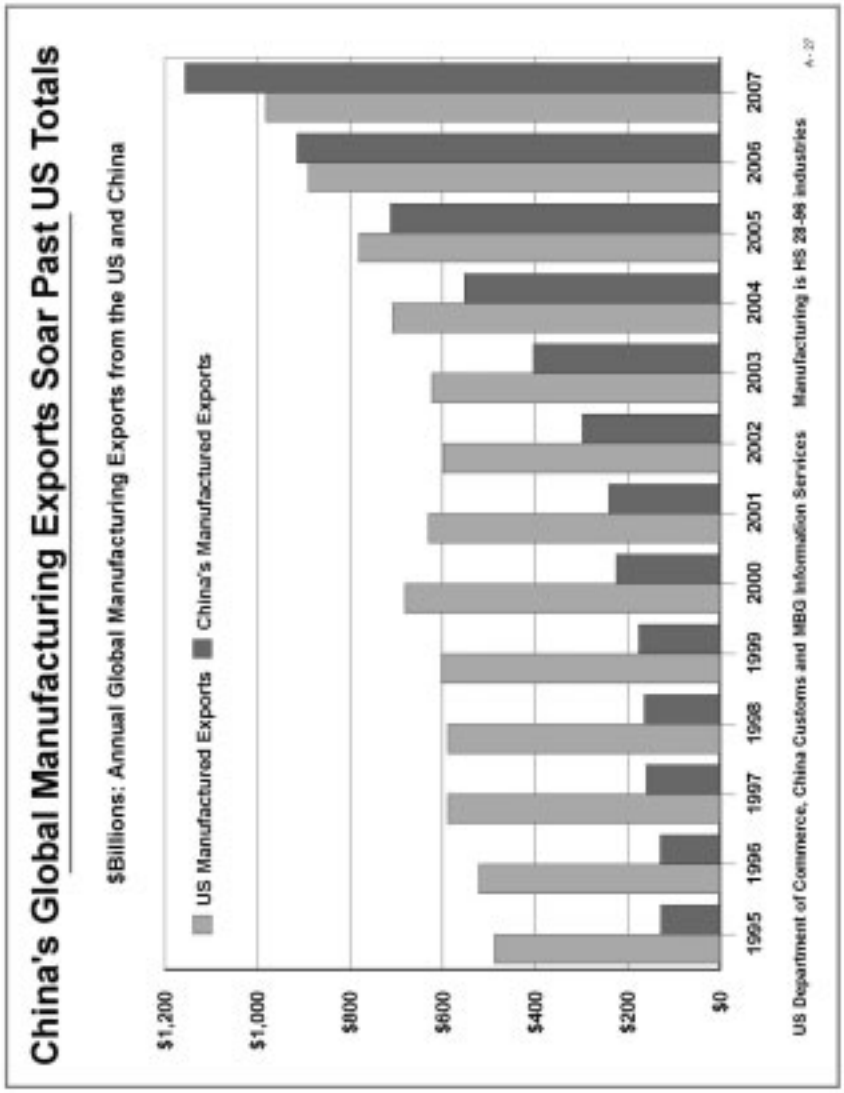
Manufacturing Employment in the United States

Source: U.S. Bureau of Labor Statistics, Manufacturing Employment, Not Seasonally Adjusted

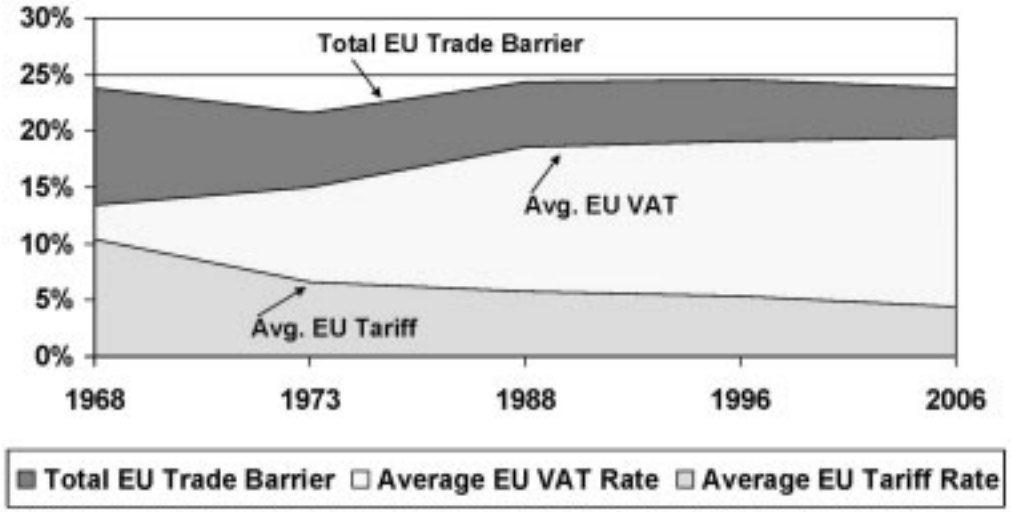


A - 25


US Demand for Durable Goods Soars
But US Production Provides only 40% of the Growth
% Volume Demand and Production Growth Since 1980
US Consumer Demand for Durable Manufactured Goods
Real Consumer Spending for Durable Manufactured Goods
US Production of Consumer Durable Manufactured Goods
US Production of Consumer Durable Manufactured Goods
450%
350%
250%
150%
0%
US Dept. of Commerce, Federal Reserve and MBG Information Services © MBG Information Services

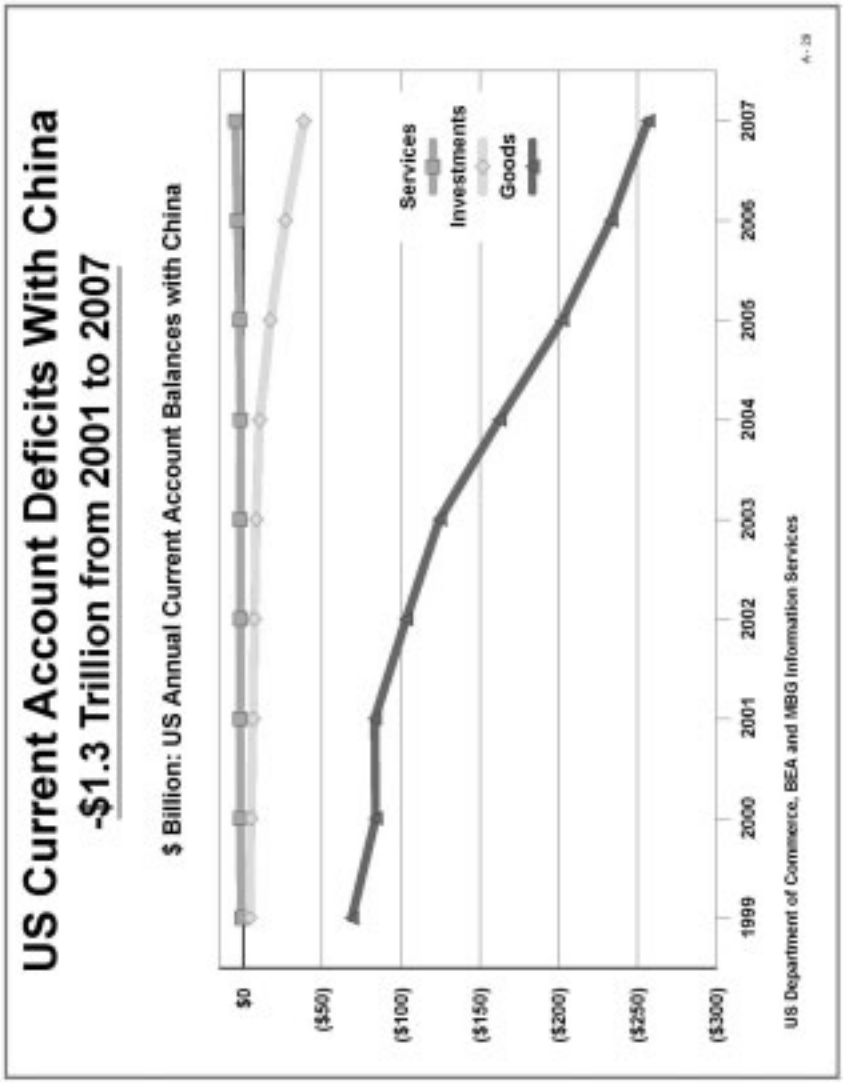

China's Global Manufacturing Exports Soar Past US Totals
$Billions: Annual Global Manufacturing Exports from the US and China
US Manufactured Exports
China's Manufactured Exports
$1,200
$1,000
$800
$600
$400
$200
$0
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
US Department of Commerce, China Customs and MBG Information Services
Manufacturing is HS 28-98 industries
A-37

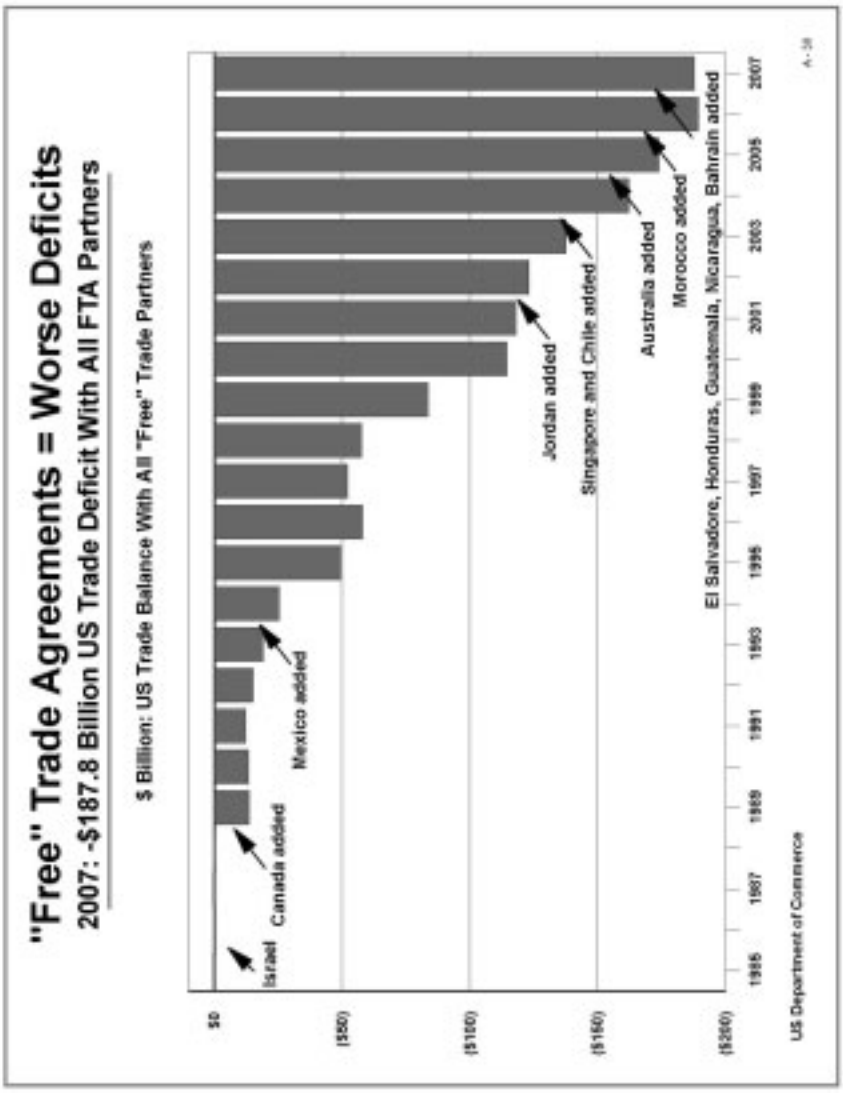
VAT Hikes Keep Aggregate European Trade Barrier Constant



Sources: Simple averages of MFN tariff rates on industrial products applied by EU countries are from the OECD and UNCTAD. For 2006, the latest available tariff rate from UNCTAD, for 2003, is assumed to remain constant. Simple averages of standard VAT rates of EU members with a VAT in effect are from the European Commission. Aggregate trade barrier is the sum of the average tariff rate and the average VAT rate for each year examined.

A - 28


US Current Account Deficits With China
-$1.3 Trillion from 2001 to 2007
$ Billion: US Annual Current Account Balances with China
$0
($50)
($100)
($150)
($200)
($250)
($300)
1999
2000
2001
2002
2003
2004
2005
2006
2007
Services
Investments
Goods
US Department of Commerce, BEA and MBG Information Services


"Free" Trade Agreements = Worse Deficits
2007: -$187.8 Billion US Trade Deficit With All FTA Partners
$ Billion: US Trade Balance With All "Free" Trade Partners
$0
($80)
($160)
($240)
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Israel
Canada added
Mexico added
Jordan added
Singapore and Chile added
Australia added
Morocco added
El Salvadore, Honduras, Guatemala, Nicaragua, Bahrain added
US Department of Commerce
A-38

BIOGRAPHY FOR JAMES R. COPLAND, III

Education

Elementary and High School—public schools Burlington, NC

College—1962 graduate UNC–Chapel Hill

Morehead Scholar, Phi Beta Kappa

Degree—B.S. Business Administration

Work Experience

1962–Present—Copland Industries, Inc./Copland Fabrics, Inc.

1986–2004—President, Treasurer & CEO, Copland Industries, Inc. & Copland Fabrics, Inc.

2004–Present—Chairman of the Board, Copland Industries, Inc. & Copland Fabrics, Inc.

1970–Present—Director, Copland Industries, Inc. & Copland Fabrics, Inc.

1963–1986—Director, Northwestern Bank, Burlington, NC

1977–1986—Director, Northwestern Bank, North Wilkesboro (Corporate Board)

1986–1987—Director, First Union National Bank, NC Board

1988–1996—Director, Executive Committee, FirstSouth Bank, Burlington, NC

1997–Present—Director, Chairman, MidCarolina Bank

1982–Present—Director, Vice President, Executive Committee, Lutheran Retirement Ministries, Burlington, NC

1986–Present—Capital Treasurer, Macedonia Lutheran Church, Burlington, NC

1994—Alamance County Man of the Year

2006—Business Leadership Award, Elon University

1992–1996—UNC Board of Visitors

Worked with various charities and foundations including—United Way, Boy Scouts of America, Alamance Citizens for Education, Alamance Community College, Salvation Army, UNC Honors Program

Married—Harriett E. Copland (40 years)

3 Sons—James R. Copland, IV; Dr. Spencer T. Copland, Jason C. Copland

Chairman MILLER. Mr. O'Shaughnessy.

STATEMENTOF MR. M. BRIAN O'SHAUGHNESSY, CHAIRMAN, REVERE COPPER PRODUCTS, INC.; MEMBER, BOARD OF DIRECTORS, COALITION FOR A PROSPEROUS AMERICA

Mr. O'SHAUGHNESSY. Thank you, Mr. Chairman.

My company is Revere Copper Products and was founded by Paul Revere in 1801. We believe we are the oldest manufacturing company in the U.S.A. Our factory is in Rome, New York, and produces copper and brass sheet, strip, coil, bar and extruded products for shipment to other manufacturing companies. Revere is a domestic manufacturing company and outsources nothing. My unwillingness to outsource or sell out is based on loyalty and patriotism.

Please note that I also represent and serve on the Board of Directors of the Coalition for a Prosperous America, or CPA. This coalition includes domestic manufacturing, organized labor, farming and ranching. You should visit CPA at www.ProsperousAmerica.org. My testimony includes positions on issues that have not yet been considered by CPA but are ever present in Revere's besieged financial results.

Mr. Chairman, the United States is alone among major trading nations in the world without a national trade policy. China and the rest of the world are waging a mercantilist war on the United States and the United States is sleeping as its factories, farms and

ranches are being systematically destroyed. We desperately need a national trade policy instead of a patchwork of trade agreements that deepen the current problems and enable foreign protectionism. Our nation's focus on general trade agreements and FTAs is misguided, inadequate and lacks strategic thinking.

While I am a proponent of free trade, the agreements to date compound the problem while deceiving many who think free trade is being promoted. This is one problem that has real solutions.

First, the United States cannot continue to negotiate global or bilateral trade agreements as long as the other country is free to manipulate its currency and use VATs to offset any tariff reduction. Also, labor, environment, antitrust, quality and intellectual and other property standards and trade agreements must be equivalent to the burden placed on manufacturing, farming and ranching in the United States or we just cannot compete and provide jobs in the United States. Can you imagine competing in a global market that gives your competition an eight-year head start? Yet that is exactly what is being proposed to kill jobs with House legislation for only domestic manufacturing companies to cap and trade and die. If the environmental burden is unfair for our foreign competition, it is unfair for us. In the global trade war, who do you represent?

Second, the manipulation of its currency by China or any nation is unacceptable. The first step should be to pass the Ryan-Hunter bill, H.R. 2942, that would define currency manipulation as an illegal subsidy and allow the application of countervailing duties, CVDs, to offset the injurious impact of currency manipulation. The Ryan-Hunter bill is designed to sanction the use of CVDs to offset currency manipulation. We must assume that the system that governs world trade is broken and must be fixed immediately. If the use of CVDs to offset currency manipulation does not lead China to stop manipulating its currency, then the United States must take stronger measures, even if it means stepping outside WTO rules.

Third, the United States must reform its tax and health care systems and institute VATs on a scale that gives production of goods and services in the United States a competitive advantage. Currently, the United States is the only country without such a policy. The United States must significantly reduce or eliminate all national taxes, both corporate and personal, including income, dividend, capital gain, estate, FICA and unemployment taxes and replace them with a consumption tax like a VAT. Under current international trade rules, consumption taxes can be rebated on exports and imposed on imports. The United States refuses to reciprocate, disadvantaging all American-made goods that compete with imports or are offered for export. No wonder we have such a massive trade deficit. In my opinion, those taxes must also include the tax of health care costs. My concern is simply that health care cannot be paid for by job providers in the United States competing with job providers abroad who pay little, if any, health costs. Either the U.S. Government solves this problem or outsourcing will resolve it.

Fourth, the United States needs to ensure that its citizens and businesses have access to substantial additional low-cost clean en-

ergy so that they are able to compete on the world stage and keep the environment clean. Our government needs to focus on the big picture of global trade and the competitive position of the U.S. economy, which is deteriorating. Please address these problems with a national trade policy immediately.

When Paul Revere tried to rouse the countryside with his wakeup call, what did the people do? They certainly didn't go back to sleep. We all need to wake up and listen but we must be careful who we listen to. Visit RevereCopper.com and learn more. Wake up, America.

Thank you, Mr. Chairman.

[The prepared statement of Mr. O'Shaughnessy follows:]

PREPARED STATEMENT OF M. BRIAN O'SHAUGHNESSY

Who Do You Represent?

Three and a half million manufacturing jobs have been lost in the USA since the year 2000. Some attribute it to increased productivity—but previous recoveries typically resulted in a loss of about one million jobs in spite of productivity increases. Some think it is our country's responsibility to support fledgling economies because we are the strongest, most powerful Nation in the world. Some say we need to set a good example and others will follow. Make no mistake about it, protectionism should not be the end game but it seems to be an acceptable practice when used by everyone but the USA.

No matter how we try to rationalize it, millions of manufacturing jobs are going overseas.

I'm sure this committee is well aware of the significant connect between manufacturing and research and development. *Manufacturing and Technology News* just ran an article on May 16, 2008 that puts the foreign flight of technology in perspective. The article is titled, "China Displaces United States In Georgia Tech's Technology Index."

The article states, "China has surpassed the United States in a key measure of high tech competitiveness. The Georgia Institute of Technology's biannual High-Tech Indicators finds that China improved its technological standing by nine points over the period of 2005 to 2007, with the United States and Japan suffering declines of 6.8 and 7.1 respectively. In Georgia Tech's scale of one to 100, China's technological standing now rests at 82.8, compared to the U.S. at 76.1. The United States peaked at 95.4 in 1999. China has increased from 22.5 in 1996 to 82.8 in 2007."

"The message speaks out pretty loudly," says Alan Porter, Co-Director of Georgia Tech's Technology Policy and Assessment Center, which produces the benchmark. *"I think the prospects are pretty scary."*

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Please note that I also represent and serve on the Board of Directors of the Coalition for a Prosperous America (CPA). This coalition includes domestic manufacturing, organized labor, farming and ranching. You should visit CPA at *www.prosperousamerica.org.* My testimony includes positions on issues that have not yet been considered by CPA but are ever present in Revere's besieged financial results.

So Revere is part of the copper and brass industry of the USA. In December, 2006, China's State Assets Supervisory and Administration Commission (SASAC) which is second only to its politburo directed that this industry in China be designated a "heavyweight" and a "vital artery of the national economy and essential to national security."

Revere's founding was considered vital to U.S. national security in 1800.

The U.S. Government loaned Paul Revere $10,000 to construct the first copper rolling mill in North America. The War Department was concerned about another war with the British and worried about the domestic content of its naval vessels to wage such a war. The USS Constitution needed copper sheathing to prevent bar-

nacles from growing on its sides underwater. Barnacles would slow the ship and cause extra time in dock to remove them. Such copper was previously rolled in Britain.

That's how Revere started and how the USS Constitution came to be sheathed with Revere Copper.

Today, many of Revere's customers are manufacturing companies located throughout the USA. Since 2000, about 30 percent of these customers have shut down, moved offshore or outsourced their production. Revere's customer mix is quite broad ranging from building and construction, transportation, electrical and electronics including weapon systems. Revere's engineers work on research and development projects regarding national defense applications including the Nation's new aircraft carrier under construction, the *Gerald Ford.* But in the context of Revere's history, let's just describe what happened recently to the production of a simple silver bowl.

Of course, this silver bowl was designed by Paul Revere.

In the year 2000, Revere shipped copper coils about 20 miles to Oneida Ltd. Oneida cut and formed that copper into a bowl and plated it with silver to produce a *Paul Revere* silver bowl. Now, that product is as American as apple pie, right? Wrong. Today, that bowl is manufactured in China and shipped to Oneida and sold as a Paul Revere replica. You probably believe that the people of Revere just can't compete anymore with the people of China.

Let me explain why our people can compete but our government does not.

Let's assume the production cost of that silver bowl made in China is 100 yuan. China manipulates its currency so that the exchange is now about seven yuan to $1. So the production cost in China is $14.28. But if the free market were to determine the rate of exchange, it would be about four yuan to $1 and the production cost in China would be $25.00.

In other words, China manipulates its currency so that it subsidizes the cost of manufacturing in China.

The current and the former U.S. administration have refused to take any concrete action against such manipulation by China and have chosen instead to jawbone. The problem with this strategy is that currency manipulation by China is serving its best interests.

The manipulation of its currency reduces the competitiveness of every other product, good and service in the world when compared to its production in China.

This form of protectionism by China is reaping huge rewards as its export-based economy is growing three or four times faster than the rest of the world with factories being built at a pace beyond the imagination of anyone just a few years ago. Meanwhile, factory jobs are disappearing in the USA and the world. Even manufacturing plants in Mexico are moving to China.

But this is more than an economic battle.

Did you catch the statement by Congressman Tim Ryan of Ohio concerning the paper ("Unrestricted Warfare") written by two Chinese military strategists? They suggested that military supremacy be achieved by undermining the manufacturing base of the United States by maintaining China's currency at artificially low levels to gain an economic advantage for Chinese manufacturing and destroying the manufacturing base of the United States. Seems to be working, doesn't it?

Personally, I admire the Chinese culture and believe that China does not need such a disruptive currency policy to compete in the world given its many other advantages. The Chinese economic policy is export driven by taxing its citizens through currency manipulation which drives inflation and takes away their disposable income. A market driven currency exchange rate policy would drive China's economy toward domestic consumption and a better life for its citizens.

But make no mistake about it, China is waging a mercantile war on the world and the world is sleeping.

Why is the world sleeping? First, we must look at the role of the multinationals. Remember in the 1980s when Japan was such a fierce competitor in so many U.S. markets. The reaction by our largest corporations was loud and largely one voice calling for tariffs and restraints. Contrast that with today as most of the largest U.S. corporations are so much more international and especially with their investments in China. Many that do not have direct investments in China buy substantial numbers of components from China's factories. Many have set their strategic plans to produce components or products in China.

It may surprise you to learn that I don't have a problem with any company that sets up a plant offshore or imports components or products. But if manufacturing in America must compete with the protectionist policies of any foreign government, that is not fair. And if meaningful corrective action by the U.S. Government is thwarted by U.S. manufacturing and financial service companies who gain from

such protectionism, that is wrong. CEOs of multinational companies are put in a very difficult position by national trade policies.

They have to choose between their company and their country.

Let me explain. Earlier I mentioned that China practices a policy of managing its currency at artificially low levels to gain a competitive advantage for any export products or services produced in China . . . by as much as 40 percent! Now, you must realize a simple truth, a multinational that manufactures in China and benefits significantly from this advantage doesn't want this to change.

It is not my intention to vilify multinationals or the capable CEOs who run them. These executives are charged with representing the best interests of their shareholders. Also, many of these CEOs of "American" companies are not U.S. citizens nor are many of their shareholders. For example, the Chairman of Coca-Cola is Irish and its President is Turkish!

It is important to appreciate that it is in our nation's best interest to have the corporate headquarters of a multinational located in the USA even if it has no remaining production facilities here. That is not so that they can be taxed and regulated and driven away but so that the high skilled, corporate level jobs are here not there . . ..

So when issues such as patriotism are raised in this paper, it is really an appeal to U.S. political leadership not that of multinational corporations.

Companies that manufacture in the USA and must compete with either multinationals or companies that outsource components from abroad believe currency manipulation is unfair and must be stopped. They see other U.S.-based manufacturing plants shutting down and are concerned that will be their fate. These domestic manufacturing companies want the U.S. Government to take effective action to right this wrong and the sooner, the better.

At a 2006 meeting I attended of an international economic policy committee of an association of manufacturing companies, one manufacturing company said that it buys components from China and does not want the current situation to change. Now there's a breath of honesty. Maybe not patriotic but at least he's honest.

Patriotic . . . why bring that word into the mix?

Well, you see the strength of manufacturing is an inherent strength of our country. Some economists believe our country is in a transition from a manufacturing economy to a service economy just as it transitioned from an agricultural economy to a manufacturing economy years ago. But maybe the manufacturing economy was simply layered on top of our agricultural economy just as the service economy is layered on the manufacturing economy. And it is certainly hard to argue against the proposition that a weak manufacturing sector threatens our national security.

Even so, some economists cite data that the manufacturing sector is doing just fine as it is producing more than ever before. Such data is misleading and you should consider the source. For example, statistics on U.S. produced products include Dell computers which are merely assembled in the USA from components produced abroad. We could argue endlessly about this but the facts are the facts and the fact is we have become a nation with a colossal trade deficit. In 2005, for the first time in over a hundred years, our nation imported more food products than it exported and our trade deficit in manufactured goods continues to soar. Indeed, our nation's trade deficit is growing by $2 billion a day! (More about this later . . .)

Sounds like our nation needs some help.

Or at least some good advice . . . and that leads me to integrity. You see when a CEO attempts to push an agenda that supports Chinese protectionism rather than an agenda that goes against that protectionism, maybe that CEO should declare that he or she is conflicted on this issue and should be recused from any forum that determines U.S. trade policy. Many of these CEOs have plants in the USA which would benefit from freer trade but they support their growing investments in plants in China and outsource components from China by choosing their company's best short-term interests over that of their own domestic plants and their country.

That's because they have to but you don't!

Supposedly, one issue before us today is how to stop China from managing its currency so as to give its production of goods and services an unfair competitive advantage. Or, is it? If you recall, earlier I mentioned the multinational delegate, the honest one . . . he said he was against a proposal that would raise his prices on the components he buys from China. I believe the real issue is, "Should the USA support measures that will not work so multinationals can support them or should the USA support measures that will work to cause China to change its policy of managing its currency?"

The multinationals have endless arguments for stretching out the process like . . .. "We don't want to start a trade war now, do we?" *But we are already in a trade war,* aren't we? Of course we are and we are losing. *We are pacifists in this*

war. How about this one by the multinationals . . .. "Your policies are protectionist!" Yes, they actually say that, can you imagine? Often the accuser benefits from China's export subsidies which are clearly prohibited by the WTO as protectionist.

The irony is that domestic producers are the victims of protectionism not the beneficiaries.

Another argument we hear is, "What about their fragile banking system?" This one has been around for years and of course, it is impossible to amend an economic strategy let alone a banking system that depends on subsidization to such an extent without removing the subsidy, isn't it? Besides, their banks are owned by the same government that is holding more than 1.7 trillion U.S. dollars worth of official reserves. Maybe their banks are not quite as insolvent as you have been lead to believe . . ..

China set up a system to manage the movement of its currency toward market levels and then used it to move its currency at rates about four percent per year compared to estimates of an underlying rate of appreciation of five percent of its currency, thereby exacerbating the problem.

Even if China were immediately to stop manipulating its currency, there is nothing to deter China from returning to the policy at a time of its choosing. Equally, other countries would be free to continue or adopt similar mercantilist policies with impunity. In fact, the author of a paper published by the UN Conference on Trade and Development in "China in a Globalizing World" (2005) has advised developing countries that "China's experience in the past decade can be seen as a model of a successful development strategy."

The author continued, "As in other Asian countries in the past, fixing the real exchange rate at a favorable level and promoting exports offers the possibility of penetrating world markets rapidly and experiencing strong growth and capital accumulation. The penetration of foreign markets brings about the rise in income needed to finance increased investment without recourse to net foreign capital inflows."

The experience so far is that China is going to delay as long as it can and make corrections in as small increments as it can get away with given its support.

Part of that support comes from U.S. trade objectives which please the multinationals that are aligned with the trade policies of China. Never give in on trade issues, but, if ever, give slowly . . ..

There is no easy solution to this Chinese puzzle. Even I have supported the verbal approach . . . for years. Our nation could simply slap a tariff on all imports from Chinese and other nations that manage their currency but I think we must take measured concrete steps that increase in severity before such a step.

China is not the only country that manipulates its currency to gain a competitive advantage. Other Asian nations also manipulate their currency partly as a defensive mechanism so their producers of goods and services can compete with goods and services originating from China.

It is important to understand that the end of currency manipulation will not end the depreciation of the U.S. dollar against other currencies including China's yuan.

For this reason, it is difficult and perhaps impossible to develop a coherent trade policy to deal with China without considering the tax policies of our own country. China uses a Value Added Tax (VAT) to protect its domestic production of goods and services and uses its revenues to fund government programs such as national health care. VATs are a tax but they are also a form of tariffs which are largely exempt from World Trade Organization (WTO) rules. The WTO was established to advance world trade. It has developed ground rules for international commerce and mediates trade disputes. Of course, China also employs a VAT tax but unlike everyone else, the VAT is applied in a discriminatory manner which is in direct violation of WTO rules.

Market determined exchange rates simply put all nations back at the starting gate for the race to determine who will win the battle to produce competitive goods and services assuming all other things are equal. Of course, all other things are not equal and because of this our nation's inability to compete with China and the rest of the world means that our currency will continue to depreciate and the standard of living of all Americans will decline and our nation will grow weaker.

This is because other trading nations use revenues generated by Value Added Taxes (VATs) to reduce the tax and health care burden on their production of goods and services and the most ambitious nations are developing energy policies which give them a competitive edge.

Here is a real world example of how VATs are used by other governments to protect their industry. Revere had an industrial plate mill in New Bedford, Massachusetts for 145 years. The plate was used in heat exchangers and in unique applica-

tions for U.S. national defense. It was considered the best quality plate in the world. Its major competitors were located in Germany but could be located in China and the principles and the result would be the same. These competitors were able to undercut Revere's prices thanks to a VAT that the German government applies to all goods and services sold in Germany, domestic or imported.

When New Bedford shipped its plate to Germany for its consumption, that plate paid the 19 percent German VAT tax. If the German mills ship plate to the USA, the 19 percent VAT tax is rebated. VAT revenues allow the German Government to help fund national health care costs and reduce corporate taxes. So German competitors pay far less in taxes and medical costs. Medical costs alone amount to about $10,000 per employee for Revere. Ironically and tragically, the New Bedford workers had to bear the burden of helping to pay for the health care of the German workers they competed with through the payment of German VATs on any Revere products shipped to Germany.

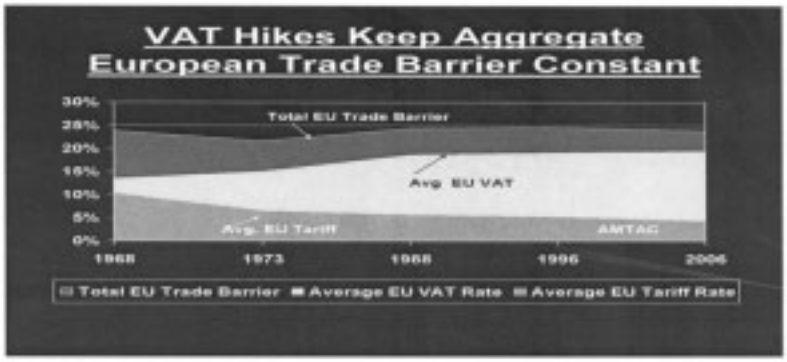
Naturally, Revere hardly shipped any product to Germany while its German competitors just loved the U.S. market.

Meanwhile, the American worker is expected to respond to these pressures by increasing productivity and reducing waste. The people at Revere's New Bedford plant did that at an astonishing pace, averaging productivity improvement at the rate of 10 percent a year for the last six years. During this period the workers and management of this mill did everything that was asked.

Yet, even that wasn't enough—on March 5, 2007, Revere announced the closure of its New Bedford mill and the loss of 87 good paying jobs.

In recent years, the USA has been negotiating Free Trade Agreements (FTAs) in an effort to get other countries to lower tariffs. This has led to the North American Free Agreement (NAFTA) in which the U.S., Canada and Mexico reduced outright tariffs. Around the time of the negotiations, however, Canada instituted VAT taxes while Mexico increased its VAT rates. VATs are excluded.

How can the USA continue to negotiate trade agreements allowing other nations to offset tariff reductions with VATs and other forms of border adjustable taxes and manipulate their currency?



These VATs are applied on our products by over 140 foreign countries. The chart above shows how the European Union countries have managed to increase VATs while lowering other types of tariffs—keeping the effective tariff the same despite trade agreements. Mexico and Canada have made similar adjustments despite FTAs. Countries that sign FTAs are free to replace the tariffs they give up with VATs charged on our goods sold to them.

The revenues collected by the foreign countries help pay for the health care cost of their manufacturing workers that U.S. workers must compete against. Foreign countries also have to collect VATs on their domestic production to comply with World Trade Organization (WTO) rules on trade but then use them to lower corporate and payroll taxes on domestic production of goods and services. Foreign producers gain even further as their nations refund their VATs on exports.

VATs protect the domestic production of goods and services in any country that has them. The lack of a VAT in the USA allows European nations to gain market share from the USA partially offsetting the impact of China's manipulation of its currency on the production of goods and services in Europe. That's one reason why

Europe is less vocal about China's mercantile war. The lack of VATs in the USA also largely explains why the USA has a trading deficit with virtually every other trading nation in every class of goods.

VATs have been adopted by all of the world's major trading nations, excluding the USA and some oil producing Middle Eastern nations.

Another nail in the coffin of U.S. manufacturing would be if the USA were to sign the Kyoto Treaty. The Kyoto Treaty exempts China, India, Brazil and other developing nations from its standards. But the carbon emissions per $1,000 of GNP in China are seven times that of the USA while India emits three times as much. The Kyoto Treaty and other measures such as Regional & National Greenhouse Gas Initiatives and carbon cap and trade schemes drive manufacturing from developed countries with more strict standards to countries with much worse practices.

These treaties and regulations have the unintended consequence of increasing carbon emissions and global warming as factories are shutdown in the USA and Europe and production increases in China.

During the days of substantial aid programs by the USA to developing nations, the primary consideration was to build an infrastructure. That included large scale projects to supply low cost, economic energy. Of course, what is true for developing nations is also true for developed nations that must compete in a global economy . . . the provision of low cost, competitive power is essential to success.

The gigantic footprint of windmills, solar energy, bio-fuels, and hydropower is so vast and the costs so uneconomic that no nation that is serious about engaging in the global competition for skilled jobs is embarking on these power programs to the extent of the USA. Any energy source that must be mandated, subsidized and surcharged to such an extent cannot be economic, can it?

In my opinion, the best large scale, low cost source of clean energy is nuclear. China is planning 40 new nuclear power plants; Japan is building 10 more while France relies on nuclear for 80 percent of its electricity. Why? Nuclear power is clean and low cost if sitting and environmental concerns are managed. Nuclear waste is dangerous but can be contained in areas much smaller than most people realize. Thirty years of nuclear waste from a 1,000 MW plant would fit in an area the size of a high school gym. If other countries can do it, why can't the USA?

The loss of manufacturing jobs to date in the USA is only the tip of the iceberg. The impact of currency manipulation, VATs and environmental/energy costs are not limited to manufactured goods. Any goods and services that compete in global markets, either directly or as part of a supply chain, are exposed to these protectionist forces. Future losses will go far beyond the continued loss of manufacturing jobs and extend to the agriculture, food processing and service industries. Indeed, Alan Blinder, former Federal Reserve Vice Chairman, was quoted in the *Wall Street Journal* on March 28th saying that, ". . . as many as 40 million American jobs (are) at risk of being shipped out of the country in the next decade or two."

Policy-makers and citizens must realize the urgency of the matter. The USA must see itself as a competing nation . . . competing in a global market for good paying jobs. But it's not only about jobs. It is also about national security and our entire economy. Factories producing goods and services necessary for U.S. national defense are moving offshore. The U.S. trade deficit is growing $2 billion a day. China and Japan have each accumulated more than U.S. $1 trillion. The accumulation of U.S. currency by China and other Asian nations is a growing bubble.

So, the looming question is, "What should be done to counter this offensive and protective behavior by other nations?"

First, the USA cannot continue to negotiate global or bilateral trade agreements as long as the other country is free to manipulate its currency and use VATs to offset any tariff reduction. Also labor, environmental, antitrust, quality and intellectual and other property standards in free trade agreements must be equivalent to the burden placed on manufacturing, farming and ranching in the USA or we just cannot compete and provide jobs in the USA.

Can you imagine competing in a global market that gives your competition an eight year head start? Yet, that is exactly what is being proposed to kill jobs in current House legislation for domestic manufacturing to cap and trade *and* die. If the environmental burden is unfair for foreign competitors, it's unfair for us.

In the global trade war, who do you represent?

Second, the manipulation of its currency by China or any nation is unacceptable. The first step should be to pass the Ryan Hunter bill (H.R. 2942) that would define currency manipulation as an illegal subsidy and allow the application of Countervailing Duties (CVDs) to offset the injurious impact of the currency manipulation. The Ryan Hunter bill is designed to be compliant with the rules of the WTO. That being said, if the WTO refuses for any reason to sanction the use of CVDs to offset

currency manipulation, we must assume that the system that governs world trade is broken and must be fixed. Immediately!

If the use of CVDs to offset currency manipulation does not lead China to stop manipulating its currency, then the USA must take stronger measures, even if it means stepping outside WTO rules.

Third, the USA must reform its tax and health care systems and institute VATs on a scale that gives production of goods and services in the USA a competitive advantage.

A smart competitor never looks at where a competitor is and tries to match that position. A smart competitor might try to match where a competitor is going to be at a certain time. But the most intelligent competitor attempts to gain a competitive advantage by providing a product beyond where the competition is going to line up in the race.

In order to achieve this objective, the USA must significantly reduce or eliminate all national taxes, both corporate and personal, including income, dividend, capital gain, estate, FICA and unemployment taxes and replace them with a consumption tax like a VAT. Under current international trade rules, consumption taxes can be rebated on exports and imposed on imports. The U.S. refuses to reciprocate, disadvantaging all American-made goods that compete with imports or are offered for export. No wonder, we have such a massive trade deficit!

The regressive nature of a VAT or consumption tax should also be offset by the provision of a national health care system to offset the unique American health care "tax on jobs."

A national health care system could utilize private insurance to provide the best choice to U.S. consumers or we could adopt a system similar to that employed by Great Britain. It provides universal health care for all but allows any citizen to opt out to private care as long as they are willing to pay the cost. I am not aware of any nation that is considering dropping its health care system to adopt the system used in the USA which eats up twice as much GNP per capita and burdens the domestic production of goods and services. My concern is simply that health care cannot be paid for by job providers in the USA competing with job providers abroad who pay little if any health costs.

Either the U.S. Government solves this problem or outsourcing will resolve it.

Also, adverse impacts on charitable and lending institutions need to be offset by matching charitable grants and providing housing subsidies which could further offset the regressive VAT system and make it fair. The new system should be designed to be revenue neutral for all classes.

Fourth, the USA needs to ensure that its citizens and businesses have access to substantial, additional low cost, clean energy so that they are able to compete on the world stage *and* keep the environment clean. The USA should use a system similar to the one used by the Base Realignment and Closure (BRAC) Commission to determine the location of surviving military bases to site nuclear power stations throughout the USA. Competing nations all over the world are building terminals and pipelines to receive natural gas to supply their manufacturing and economic base. So must the USA. We simply must not allow the events of 9/11 to destroy our nation's ability to compete by stifling the expansion of natural gas terminals and pipelines.

The U.S. is alone among major trading nations in the world without a national trade policy.

The result is that the U.S. is being defeated in international trade. American manufacturers are extremely efficient. Indeed, I would argue those still remaining are the most efficient in the world because they are surviving despite unfair foreign protectionist practices that general trade agreements like GATT and Free Trade Agreements (FTAs) allow to continue.

The demand in the U.S. for durable manufactured goods has soared about 400 percent since 1980 as our economy has grown. But U.S. production of these goods grew only 40 percent. Without foreign government trade cheating, U.S. production would have been far greater. Revere Copper's exports and domestic sales would have grown very large indeed.

Our nation's focus on general trade agreements and FTAs is misguided, inadequate and lacks strategic thinking. Although I am a proponent of free trade, the agreements to date compound the problem, while deceiving many who think free trade is being promoted.

China and the rest of the world are waging a mercantilist war on the U.S. and the U.S. is sleeping as its factories, farms and ranches are being systematically destroyed. We desperately need a national trade policy instead of a patchwork of trade agreements that deepen the current problems and enable foreign protectionism. That is what we should be hearing about from our Congress and the remaining

Presidential candidates. We are running out of time. What a mess we are leaving our children. This is one problem that has real solutions.

Our government needs to focus on the big picture of global trade and address these problems with a national trade policy immediately.

When Paul Revere tried to rouse the countryside with his wake up call, what did the people do? They certainly didn't go back to sleep. We all need to wake up and listen. But we must be careful who we listen to . . ..

Wake up, America!

BIOGRAPHY FOR M. BRIAN O'SHAUGHNESSY

Brian O'Shaughnessy is the Chairman of Revere Copper Products and served as President & CEO for almost twenty years until the end of 2007. His company was founded in 1801 by Paul Revere and may be the oldest manufacturing company in America. Revere does not make pots and pans anymore but makes copper and brass sheet, strip and coil as well as extruded products for shipment to other manufacturing companies. Brian did a leveraged buy out of Revere in 1989.

Brian is recognized as an expert on international trade & taxes as well as energy and environmental issues. He championed and chaired the world class, worldwide copper industry's environmental program. In February of 2006, the Copper Club named Brian as its Copper Man of the Year—an international award considered the most prestigious in the copper industry.

Brian has chaired two industrial energy advocacy committees and serves on the board of directors of a third group. He also serves on the board of directors of a public utility with transmission and distribution operations for gas and electricity in New Hampshire, Maine and Massachusetts.

In 2005, Brian testified before the U.S. Senate Committee on Energy and Resources and testified in 2006 before the U.S. House of Representatives Committee on Government Reform regarding energy, trade and tax policy. In May, 2007, he testified before a tripartite hearing on China Currency Issues before subcommittees of the House Ways and Means, Energy and Financial Services Committees. In July, 2007, he testified before a U.S. Senate subcommittee hearing on the impact of China Trade on U.S. manufacturing. Brian has appeared on BBC World News and been interviewed on Bloomberg on the Economy as well as PBS. Brian has written oped pieces for various newspapers including the Boston Globe.

Brian also serves on the boards of directors of the Manufacturers Alliance of New York and the Manufacturers Association of Central New York (MACNY) and served on the BOD of the National Association of Manufacturers (NAM). At NAM, Brian is on its International Economic Policy Committee and its China Policy Subcommittee. Brian is a past Chairman of the U.S. Copper & Brass Fabricators Council and currently a member of its BOD. He testified on its behalf before the International Trade Commission. Brian is currently Chairman of the Copper Development Association (CDA) and serves on the BOD of the Coalition for a Prosperous America (CPA).

Brian is a national leader of domestic manufacturing companies attempting to change U.S. international trade and tax policy to help level the playing field for domestic manufacturing.

Prior to joining Revere, Brian spent twenty-one years in the international copper mining industry with seven years each in operations, marketing and corporate administration.

Brian graduated with a BS in Industrial Management from the University of Nevada and studied International Business in Graduate School at the University of Southern California. USC course work included "Advanced Problems of International Finance" and "Case Studies in International Business."

Brian is celebrating 40 years of marriage with three sons and four grandchildren. In 2002, Mr. O'Shaughnessy rode his Harley Davidson on two-lane scenic roads from Moody Beach, Maine to Seattle, Washington stopping off in Sturgis, South Dakota. Mr. O'Shaughnessy is an avid snow-boarder and golfer but spends most of his time working!

Chairman MILLER. Thank you.

Mr. Jurey.

STATEMENT OF MR. WES JUREY, PRESIDENT AND CEO, THE ARLINGTON, TEXAS CHAMBER OF COMMERCE

Mr. JUREY. Mr. Chairman, thank you for the opportunity to appear before the panel. I may bring a slightly different perspective than those who have testified before.

As President of the El Paso Texas Chamber of Commerce during the 1990s, I was leading that chamber during a period when we lost 23,000 jobs in the garment industry so I am acutely aware of those issues and yet many of the experiences there have led me to the things I will share with you today, and at the end of that decade we actually had more net employment in the county despite the fact that we lost that many jobs. I then went to Arlington, Texas, in 2001 and have led that chamber in the past nearly seven years, took that community from a time of economic stalemate to a time of robust growth in its tax base and jobs as well, and so I will offer some thoughts from those perspectives.

I would say at the outset that there are two factors that happened in the 1980s that we sometimes overlook, and that was that the Cold War ended. We asked Premier Gorbachev to tear down the wall, and the unintended consequences, we put three billion people into competition with us in the world's marketplace and we are not going to turn that clock back. Then we invented the Internet in the federal labs and we gave people the ability with the click of a mouse to move CAD drawings and X-rays worldwide and we are not going to close that door again either.

And so the reality is, we are in a truly globally driven, innovation-driven economy and the critical issue, how do we maintain U.S. competitiveness, and from my experience, these companies have two critical factors they have to think about: do they have access to a highly trained, skilled, competitive workforce, and what is the true cost of doing business in the area they are at, often derived from various factors including things like whether we tax consumption, production or wealth, as well as what kind of regulatory climate and processes are they competing with in that climate, and so I will offer five brief suggestions.

Number 1: If you look at the publicly funded workforce system, it is not that you need more dollars, it is that we need to think very carefully about how we both allocate and deploy the dollars that you do spend. And I would say that at the outset, if you look at the *Workforce Investment Act* (WIA), it is written from a job seeker perspective, not an employer or job creator perspective, and therein lies your challenge. We are currently managing a grant for the Texas Workforce Commission. It is a modest grant of $1 million, and the goal is to create replicable, sustainable, scalable models of how we engage the systems to work together to provide workers for advanced manufacturers. I will give you simple examples. National Semiconductor spent $50 million retooling a plant to go from a six- to an eight-inch wafer to remain competitive in the United States, finding no curriculum to retrain their staff with. We are putting modest sums of money into National Semiconductor. Our community college and our university, they are cataloging training National Semi is having to develop. The outcome will be curriculum that can be employed in the future at a fraction of the cost to National Semi. A second quick example is Progressive, a company

building a part for Lockheed Martin for the Joint Strike Fighter, can't find the seven machinists it needs today, let alone the 400 it will need in the future. There are hundreds of unemployed machinists in Michigan but the Texas Workforce Commission can't spend $1 letting them know these jobs exist, and there is little training capacity in Texas, and so we are putting dollars into the Dallas and Tarrant County college systems to create that capacity.

The commonality of many examples I could cite for you is that under current DOL [Department of Labor]/WIA regulations, the ways we are deploying and allocating these dollars would be exceedingly difficult to do under those regulations, and my bottom-line recommendation, and there are many in my written testimony, is a really thoughtful look at both the process and the measures would help those dollars be spent far more effectively to address many of the workforce needs and the challenges that these employers face.

Secondly, to recognize that if we need highly skilled workers to drive a highly innovative economy, that if you look at the graduate and postgraduate programs in the United States, 50 percent of those students are either immigrants or they are foreign students. Forty percent of all Ph.D.s granted in 2006 went to those foreign students or immigrants and 75 percent of those Ph.D.s will go to foreign students or immigrants in 2010. We have an incubator in Arlington. We started it with the University in 2002. In the past six years, more than 75 percent of all the intellectual discoveries and innovative ideas coming to us came from foreign students and immigrants, and the bottom line is, they can either go home and take that innovation with them or we can find ways to both protect our borders and welcome legal immigrants and keep the innovation in the United States.

Third, federal R&D funding. In talks with Dr. Zerhouni at the National Institutes of Health, I commend him because under translational awards, called road maps sometimes, he has recognized that if you take some of the $27 billion NIH uses to fund health research and put it into the hands of universities that partner with the private sector in a genuine collaborative environment, that the commercialization activity resulting then takes place in the United States, not foreign countries. And if you look at what they are doing in Homeland in the Science and Technology Directorate, they have funded six major research projects to date, all through major universities all required collaboration with 20 to 30 other partners, both private sector and nonprofit and other universities. And I would commend you to those models because they take Federal R&D dollars, they leverage private sector and university dollars and they ensure the commercialization takes place in the United States, and if you look carefully at Northern California from the 1940s and 1950s on, it is frankly how they became Silicon Valley.

Fourth, promote global cooperation in the international tax arena. As was cited, foreign countries do many things with their currency and their taxation, but the reality is, we have got to go back to looking at the factors that drive U.S. competitiveness, and a part of it is taxation. Are we taxing production, wealth or con-

sumption? What does that do in the regulatory environment and how does that impact cost structure?

I remember Reynolds aluminum plant in Arkansas in the 1980s. They paid high wages, $25 to $45 an hour in 1984, but their cost was the cost of electricity. They paid $100 million a year to Arkansas Power and Light for electricity, and the rumor started that they were going to move and go to another city in another state and everybody scoffed at the idea because they just built the $42 million plant. The plant manager put it in perspective. He said, "Wes, if you pass second grade math, you will understand that if a city offers me that utility kilowatt hourage at $60 million a year, in three years I will net $80 million to the bottom line in a highly competitive industry while abandoning that plant to your industrial development corporation and building a new plant in the other city." And so although we can say we kept those jobs in America, that was little consolation for the people in Hot Springs and Malvern, Arkansas, who lost their jobs, the city and county who lost the tax base, and $100 million hole left in the rate base of Arkansas Power and Light. And so it really is critical to think about the cost factors of those companies and how we think globally and talk about the international tax arena. That could be an area where the United States leadership could be impactful.

And fifth, focus on the prevention of harmful regulatory competition internationally. Use our economic international diplomacy in those arenas. Imagine if the General Motors plant in Arlington, Texas, that brings in components from over 600 suppliers throughout the United States imposed tariffs on all of those supplies. Well, the truth is, the United States economy is strong because interstate commerce is regulated in a way that allows that trade to flow among and between the 50 states. In the global competition, we are going to have to find ways for that trade to flow fairly throughout the countries of the world because again, we are not going to be able to turn the clock back.

I would say in summation that the number one most vital recommendation I have is that our economic policy promote globalization. For 60 years we told foreign companies to open their markets and for the last 20 years they finally did, and that coincides with the time of economic prosperity in the United States. We have got to recognize too that 96 percent of the world's consumers live in another country. We have grown because we were a land of immigrants and we fed on their hunger and their energy and their innovation and we have become one of the most open competitive societies in the world, and I close by leaving you with this thought. Dr. George Kozmetsky, considered one of the pioneers and founders of Silicon Valley, published an extensive demographic analysis in 2000 going back to 1950 and forward to 2050. He said on giving me a copy, "We are living in a time when 88 percent of the wealth is controlled by 12 percent of the people in countries all demographically projected to decline through 2050, meaning 12 percent of the world's wealth is what 88 percent of the world's people try to survive on, all in countries demographically projected to grow for the next 50 years. What do you think that means?" he said. And my comment was, I would much rather understand what he thought, and he said, "I think it is simple; Global competitiveness

will cause us to finally go to war over resources or learn to integrate the global economy so that every nation has a stake in a strong global economy in which the United States can remain competitive.

I appreciate the time given to me to speak to the panel.

[The prepared statement of Mr. Jurey follows:]

PREPARED STATEMENT OF WES JUREY

The United States today finds itself in unprecedented and unchartered waters. For the past several decades, our super power status has largely gone unchallenged, something seldom seen in history other than perhaps the Pax Romana nearly 2000 years ago. It has been an unprecedented time of global economic growth and expansion, fueled, I would argue, by two seemingly unrelated events in the 1980s.

The first was the end of the Cold War, symbolized by President Reagan's pronouncement to Premier Gorbachev to "Tear down this wall." What should be noted is that the end of the Cold War allowed under developed nations to shift their focus from defense to develop educational systems and economic and transportation infrastructure necessary to compete.

The second was the discovery of the Internet in a U.S. federal lab, enabling everything from x-rays to engineering design to be transferred world-wide with the simple click of a mouse. Viewed from an historical perspective, those two seemingly unrelated events in the 1980s have enabled global economic development during the past 20 years.

In his book, *The Post-American World,*[1] Fareed Zakaria argues that we are living through the third great power shift in modern history. The first, the rise of the western world, around the 15th century, produced the world as we know it now—science and technology, commerce and capitalism, and the industrial and agricultural revolutions. It also led to the prolonged political dominance of the nations of the western world.

The second, in the closing years of the 19th century, was the rise of the United States. Once industrialized, becoming the most powerful nation in the world, stronger than any likely combination of other nations.

The third, the one we are experiencing now, is the rise of the rest of the world, largely driven by a global economy that has dramatically accelerated. Zakaria further argues that this post-American world, although an unsettling prospect for Americans, is not a decline of America, but rather the rise of everyone else, fueled by the Innovation Economy.

From my perspective, the Innovation Economy really isn't new; it simply is a relatively new way of describing what has always the driver of wealth creation. Historically, research resulting in technology innovation has been the primary driver of economic growth and development.

For the most part, technology led economic development has clustered around and been driven by universities who understood that commercializable research is the basic cornerstone in the creation of technology start-ups. The most successful innovation economies have been the result of effective partnerships between universities and the private sector, focused on technology transfer from the lab to the marketplace. Clear examples include the role Stanford University and the University of California played in the evolution of Silicon Valley; MIT and Harvard in the development of the Boston Biotech Corridor; and Duke and the University of North Carolina in the growth of the Research Triangle.

In these regions, applied research is the basic cornerstone for the creation of technology start-ups, new applications for existing technology, as well as new technologies. The resultant products form the basis for thousands of companies.

What is new, however, is the unprecedented challenge we face in our communities, regions, states and as a nation in terms of global competition. As examples, the emergence and evolution of India, China and Brazil during the last two decades from an economic perspective is truly staggering. If we clearly look back to the early 1900s, technology discoveries resulted in the creation of the assembly lines that sparked the industrial revolution. In a similar manner, the discoveries that led to the Internet essentially sparked the Innovation Economy we find ourselves competing in today.

George Kozmetsky, one of the founders of Silicon Valley, stated "All human affairs—political, social, economic, cultural, and business—are conducted by human

[1] *The Post-American World,* Fareed Zakaria, W.W. Norton & Company, Inc., 2008.

beings; people's motivations, ingenuity, and creativity ultimately determine success or failure in all these human affairs."[2]

His statement supports the U.S. Chamber's premise that "the toughest, most important competition in the 21st century worldwide economy will be the global race for talent and workers.[3] From my perspective, the outcomes will largely determine U.S. competitiveness in the future.

We are competing in an era in which the U.S. represents only four percent of the world's population, while consuming approximately 26 percent of our planet's available resources with the U.S. population projected to decline for the next 50 years. At the same time, most of the planet's natural resources, people, capital, and markets reside some place else, generally in countries where the populations are projected to grow for the next 50 years.

In recent columns, dated April 26 and May 4, 2008 in the *Financial Times,* Laurence Summers, Harvard University professor, argues that America's economic policy has supported an integrated global economy, stimulating the development in poor countries, particularly in Asia, at unprecedented rates. Yet American commitment to internationalist economic policy is ever more in doubt. He further argues that this has been the right economic policy, and that withdrawing from the global economy is untenable, ultimately reducing U.S. competitiveness.[4]

And from the Federal Reserve Bank's March newsletter comes this opening line; "Innovation is key to global growth in rising living standards."[5] My response is that our ability to remain highly innovative depends largely upon our ability to continue to train, educate, and retain a highly skilled workforce.

In responding to the Committee's request to explore the issues of U.S. competitiveness, and in particular those factors that drive and influence U.S. firms' decisions to retain existing production and research capacity at home or take it abroad, I offer the following observations and suggestions.

I'll begin with an observation. Since 1990, corporate location decisions have increasingly been driven by two key factors; the availability and competitiveness of the workforce in areas in which the company locates, and the competitiveness of the regulatory environment. Both determine the ability of the company to remain competitive. Much has been said and written about incentives. In practice, I have found that they are not the primary determinant, since the ability of a company to remain profitable month after month, quarter after quarter, and year after year is highly dependent upon the competency of the workforce and the cost of doing business in a particular location. In a free market economy, it generally comes down to that. From that perspective, I offer five suggestions to the Committee.

First, *the manner in which we allocate and deploy funding for workforce development should enable and empower our publicly funded workforce development system to become talent developers rather than funders of training.* Allow me to explain. Since 1990, I have been highly involved with the U.S. Department of Labor, the Texas Workforce Commission, and two local workforce development boards. I have done so because in the communities I have served, I have found that the most critical need is to ensure that the companies we are attempting to both attract and retain have access to a highly skilled, highly competitive, highly innovative workforce.

Through my participation in a variety of national pilot projects, and service on various Texas Workforce System and U.S. Department of Labor advisory boards, committees, and commissions, I have found that it is not necessarily the amount of funding we allocate but rather the means by which we deploy it, and the restrictions we place upon it. As a recent example, the Arlington Chamber of Commerce is currently administering a grant from the Texas Workforce Commission; the primary purpose being to develop replicable, sustainable, scalable model pipelines that develop the talent and supply chain for advanced manufacturers, rather than simply funding job training assistance.

The focus of our work is fairly simplistic. The Chamber works to identify specific workforce challenges employers face. In doing so, we engage the local workforce development board, our local community college system, and our local university. Collectively, as partners, we identify the challenge, design the solution, and do what is necessary to resolve the employer defined challenge.

National Semiconductor, for example, recently spent $50 million retooling 26 machines to convert production from a six- to eight-inch wafer. Their challenge: to re-

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[2] *Embracing the Global Demographics Transformation 1950–2050 Sharing Peace and Prosperity in the Global Marketplace,* George Kozmetsky and Piyu Yue, IC2 Institute, University of Texas at Austin.

[3] *The State of American Business,* 2008, Thomas J. Donahue, U.S. Chamber of Commerce.

[4] The Financial Times Ltd., Lawrence Summers, 2008.

[5] Economic Letter, Federal Reserve Bank of Dallas, March 2008.

train their workforce, with no curriculum available to do so. In response, the Chamber engaged the university and community college to collectively catalogue training conducted by National Semiconductor, in order to develop curriculum. Grant funding provided approximately 20 percent of National Semiconductor's training cost. The outcome—retrained workers and curriculum for future training needs, meeting the critical need for the employer.

As another example, we began working with Progressive last fall, a local company that is one of Lockheed Martin's many subcontractors for the Joint Strike Fighter. Progressive indicated they will need to hire 400 CNC machinists over the 20-year life of the contract, and cannot find the seven they currently need. This, despite the fact that their starting salary is $86,000 annually. As we continued this work, we discovered that Progressive is not alone; that there are a significant number of companies in need of machinists; and that the critical factor in North Texas is the lack of capacity to train machinists. As a result, we are allocating some of the funds directly to the Dallas County and Tarrant County Community College Systems to enable their collaboration to develop the training capacity necessary to train skilled machinists in North Texas.

It should be noted that in our discussions with employers, they indicated that they can pay machinists $86,000 to $106,000 because of the increased productivity of the United States' worker; however, they also indicated that as wages continue to escalate due to the lack of skilled machinists, there would come a point where cost versus productivity would meet, and they would be forced to move these jobs offshore.

As a third example, the General Motors Assembly Plant in Arlington is working with us to develop internships for high school students, apprenticeships for promising interns, entry level certification, and incumbent worker training. All defined as critical to their competitiveness. This example prompts me to point out that although participants in DOL apprenticeship programs are paid during their apprenticeship, there are essentially no DOL funds allocated to directly support this effort, other than direct staff technical assistance. This despite the fact that every federal dollar spent for apprenticeship leverages significant private sector dollars.

What is important to understand about all three models is that they would be difficult to fund under current DOL/WIA guidelines. First, the law itself is crafted, and the services and centers funded under WIA are based upon the job seekers perspective—the supply side—rather than the demand side. That translates into the need for State and local workforce systems to be highly creative in structuring grants or contracts in order to fund the types of activities I have cited.

Second, if it is truly our intent to create an employer driven system, then we must take into account that employers are faced with two primary factors critical to their competitiveness; speed to market, and rapid response to market conditions. That same criterion, however, seldom applies to public funding. Therefore, we must minimize both the time it takes an employer to secure funding, and the process employers' view as unnecessarily cumbersome.

Third, we should assess the performance measures that State and local workforce investment boards have to meet, because they don't reflect the factors determining industry competitiveness. Again, the focus of performance measures is on the supply side, relative to job seekers, rather than the demand side, relative to jobs being created. These measures also place more focus on entry level, rather than incumbent workers who need enhanced skills to advance. By focusing on incumbent workers who gain the skills to move up the ladder, we also create the entry level positions job seekers require.

Fourth, the system should allow greater flexibility. I understand that a call for flexibility is often perceived as a request to not be held accountable for achieving results. In response, I firmly believe that recipients of these funds should be held accountable for measurable outcomes. I also believe you must allow recipients the flexibility to be innovative in the manner in which they work to achieve the measurable outcomes.

The simple truth is that employers don't use the publicly funded workforce development system. Whether real or perceived, they view it as difficult to work with and unnecessarily cumbersome.

My overall recommendation is that a detailed analysis of the processes employers are subject to in order to utilize these funds should lead to opportunities to effectively streamline the process required, and re-think the measurements. I might add that a recent study by the U.S. Small Business Administration indicated that the average small business spends $7,647 annually as the cost of regulatory compliance per em-

ployee.[6] When you add to that the slow, cumbersome, regulatory process to access the publicly funded system, it may lead to a greater awareness as to why these funds are not more effective in achieving the outcomes we expect from their use.

I would also suggest that it would be helpful if the U.S. Departments of Labor and Education work together with major U.S. business organizations, such as the U.S. Chamber of Commerce, the National Association of Manufacturers, and other such national employer organizations, to clearly define workforce readiness precluding the fifty states from each separately trying to do so. Given our extremely mobile workforce, we frequently find that workers are trained and certified for jobs they can't find in the regions they are in, requiring them to move to other regions in order to secure meaningful employment. When they do so, their certification frequently doesn't reflect the work readiness credentials and certifications established in other regions. An industry led and developed work readiness definition, universally accepted throughout the United States, would enable certification to be universally understood, increasing the likelihood of matching the supply of job seekers with the demand of jobs we've created, regardless of the geography.

Second, *if we recognize that highly skilled innovative people are necessary to drive our economy, then we need to recognize that nearly 50 percent of the students in our graduate and post-graduate programs at our nation's universities are foreign students and immigrants.* In 2006, they received 40 percent of all Ph.D.s and by 2010, 75 percent of all science Ph.D.s in this country will be awarded to foreign students. If our immigration policies allow these students to stay upon graduation, then innovation will happen here. If our policies force them to leave, they take their innovative talents with them.

In other words, the potential for American productivity may depend far more on a rational immigration policy that both secures our borders and welcomes legal immigrants to our shore, rather than on the quality of our actual education systems or amount we spend for research and development. Let me share a local example.

In 2002, the Arlington Chamber established the Arlington Technology Incubator in partnership with the University of Texas at Arlington. Our focus was very basic—we intended to support the commercialization of intellectual discoveries emanating from the labs of our university. At the time, UT Arlington had one of the first nano-fabrication labs in the southwest; and one of the few in the United States. This essentially meant that UT–Arlington scientists could fabricate working mechanical devices at the molecular level. By contrast, the National Institute of Standards and Technology launched its nano-fabrication lab in 2007.

Our focus was on ensuring that research resulting in patentable, licensable discoveries would be nurtured through proof of concept, proof of product, and proof of market; providing access to venture funding to bridge the gap until the technology was ready for introduction to the marketplace. During the past six years, the vast majority of intellectual discoveries brought to the incubator are from scientists who are foreign students or immigrants.

Third, *we should allocate federal R&D funding, to the greatest extent possible, to support industry academic research partnerships; thereby leveraging federal dollars with both private sector and university dollars while ensuring that commercialization activity resulting from such research takes place in the United States.* Allow me to explain. During a meeting with Dr. Elias Zerhouni, Executive Director of the National Institutes of Health, he indicated that of the approximate $27 billion annually spent by NIH on health care and related research, most of the resultant commercialization takes place offshore, in countries we compete against economically. Under new programs developed by NIH, college and university systems are designated "translational centers" based on their ability to demonstrate significant collaboration among and between universities, while partnering with the private sector. Under the terms of the *Bayh-Dole Act,* granting the funds to universities who partner with the private sector ensures that the patentable discoveries are commercialized in the United States. This simple act—that of linking industry and academia while funding academia ensures that the commercialization of research financed by federal R&D dollars would inure to the benefit of our local, regional, State and national economies, and support the development of top tier research universities as regional economic drivers.

Fourth, *we should take the lead to promote global cooperation in the international tax arena.* Just as U.S. corporations frequently locate in states where the corporate tax structure favors their business model, firms that do business internationally increasingly headquarter in countries whose tax structure favors their business model. As we assess the issue of taxation, it should be noted that we fundamentally tax

[6] *The Impact of Regulatory Costs on Small Firms,* W. Mark Crain, U.S. Small Business Administration, September 2005.

one of three things; productivity, consumption, or wealth. In turn, it is important to understand the factors that drive a particular business, in terms of assessing the impact of a country's tax structure on that particular business. If, for example, a particular business is capital intensive, meaning their business model requires significant outlays for taxable property and equipment, then taxing wealth would be seen as a disincentive to that business. On the other hand, a company with little capital expense, but significant production cost would find a tax system built on taxing production as a disincentive. What we often fail to take into account is the impact of the allocation of tax in terms of production, wealth and consumption on the key industry clusters that drive our economy.

Allow me to provide a simple analogy. During my tenure in Hot Springs, Arkansas in the 1980s, a rumor surfaced that the Reynolds Aluminum plant might relocate. At the time, the regional director of Arkansas Power & Light assured me it wasn't so, citing the expenditure by Reynolds of $42 million to build the plant. However, my conversation with the plant manager put it in proper perspective. My cost isn't people, he explained, although he paid his production workers $25 to $45 dollars an hour in the mid 1980s. My cost, he stated, is a $100 million dollar a year electric bill to Arkansas Power & Light. In recent months we have been offered the same kilowatt hours for $60 million annually by other cities. The cost of this factory including equipment, was only $42 million. I could actually abandon the factory and move to one of the new communities offering reduced electrical rates, build a new production plant, and still net $80 million over three years in a highly competitive global business. When the plant closed, it left hundreds of people unemployed and Arkansas Power & Light with a $100 million hole in its annual rate base. Simplistic, perhaps, but it is one more way to point out that the factors that drive U.S. companies to make decisions about where to locate are based on their ability to compete; and that a key factor is their cost of doing business, whether based on the tax structure or other key factors.

Fifth, *we should focus our international economic diplomacy on the prevention of harmful regulatory competition.* As an example, imagine the challenge of the United States maintaining economic prosperity if every state in the union had differing regulations that impacted interstate trade.

For example, imagine Texas imposing tariffs on the parts and components used by General Motors in Arlington received from more than 600 suppliers located throughout the U.S. The reality is the United States' economy is vibrant largely because interstate commerce is supported by an overlay of federal regulatory guidelines rather than competitive State guidelines. In a similar manner, the United States must acknowledge that the global marketplace increasingly needs to think about global regulatory competition. Just as companies in countries we compete against are integrating their production lines with developing countries, we must integrate our country's regulatory structure with the structure of the world's marketplace.

In closing, *I would encourage the Committee to recognize that the single most important thing the Federal Government can do is support economic policies that promote healthy globalization, strengthening efforts to reduce inequality and insecurity throughout the world.*

For the past 60 years, the United States has encouraged foreign countries to open up their markets and increasingly in the last 20 years they have done so. During those two decades, the U.S. has also enjoyed unusually robust growth, low unemployment, and increased productivity, with most of the job gains coming from small and medium size businesses during a time of rapid globalization. I would argue that the opening of these international trade markets has been a critical driver of our economic growth, and as the world continues to globalize, we must continue to globalize with it; particularly in a time when 96 percent of the world's consumers live in foreign lands.

At the same time, we should remember we are a land developed by the hunger and energy of immigrants. In the process we have become the most open, flexible society in the world. We have absorbed people—their cultures, their ideas, their goods and services. That very openness has inspired and encouraged innovation. And we are still dominant in the technologies that will drive future growth, such as nanotechnology, and our universities are still among the best in the world. In recent rankings, U.S. universities received eight of the top 10 rankings, 37 of the top 50. Faced with continued international competition, we have adapted and adjusted; primarily through our ability to innovate.

I leave you with this closing thought. I was privileged to know George Kozmetsky, both as a mentor and a friend. Acknowledged as one of Silicon Valley's founders, he published a demographic analysis in 2000. He gave me one of the first copies with this comment; "Today 88 percent of the world's wealth is controlled by 12 per-

cent of the world's population, all living in countries demographically projected to decline in the next 50 years. That means 88 percent of the world's population struggles to live on 12 percent of the world's wealth, all in countries demographically projected to grow over the next 50 years. What do you think that means?" I responded by stating I was far more interested in what he thought. His reply has stayed with me ever since. "It means one of two things, he said. We will ultimately go to war over the resources nations need for people to survive, or we will learn to become an international marketplace where trade and commerce link and integrate the countries of the world, one to the other, providing the very motivation needed to stabilize our global economy."

The Arlington Chamber of Commerce

The Chamber's mission is to serve as the primary catalyst for Arlington's economic development, fostering a positive business environment through the enhancement and diversification of our economic base, representing the business community on public policy and community issues that impact the ability of Arlington citizens and businesses to reach their full economic potential.

The Arlington Chamber of Commerce is one of North Texas' largest business federations, representing more than 1,400 businesses and organizations of every size, sector, and region.

More than 96 percent of the Chamber's members are small businesses with 100 or fewer employees, 70 percent of which have 10 or fewer employees. Yet, virtually all of Arlington's largest companies are also active members. We are particularly cognizant of the problems of smaller businesses, as well as issues facing the business community at large.

Besides representing a cross-section of the Arlington business community in terms of number of employees, the Chamber represents a wide management spectrum by type of business and location. Each major classification of American business—manufacturing, retailing, services, construction, wholesaling, and finance—is represented. Also, the Chamber has substantial membership throughout North Texas.

The Chamber's State and national engagement is substantial as well. The Chamber has been and continues to be a participant in a number of State and national pilot projects and innovation grants, focused on the Innovation Economy and developing and maintaining a competitive workforce.

Our positions on State and national issues are developed by a cross-section of Chamber members serving on committees, subcommittees, and task forces. More than 300 business people participate in this process.

BIOGRAPHY FOR WES JUREY

President & CEO of the Arlington Chamber of Commerce since 2001, Jurey also serves as Chair of the U.S. Chamber's Institute for a Competitive Workforce; was appointed in 2007 to a six-year term on the Texas Workforce Investment Council; and appointed in 2008 to a two year term on the U.S. Department of Labor's Advisory Committee on Apprenticeship. He was one of nine individuals appointed to the U.S. Department of Labor committee charged with developing DOL's five year research plan for 2002–2007.

He founded the Center for Workforce Training & Preparation in El Paso, Texas; was a partner in the establishment of the Center for Continuing Education & Workforce Development in Arlington, Texas, and is the founder of the Arlington Technology Incubator.

DISCUSSION

Chairman MILLER. I want to thank all the panelists. We were just called for a vote.

We have now had proposals that are out of the usual mainstream political debate to the left and out of the mainstream political debate to the right, so we wanted an open discussion of ideas that aren't part of the usual debate and we certainly have had that.

I will waive my first round and recognize Mr. Baird. Do you have questions? Oh, one second, please. For now, Mr. Baird.

Mr. BAIRD. I thank the panelists. I thought all of the comments were very insightful and I appreciate the struggles, particularly

Mr. Copland and Mr. O'Shaughnessy as you try to meet the challenges of keeping domestic workforce and industry viable. One could say that Mr. Jurey's comments were contradictory to Mr. Copland and Mr. O'Shaughnessy. I don't necessarily see it so as I listened. It sounded to me like Mr. Jurey was saying, "Look, if we blame it all on trade, we are missing a whole lot of other things we could be doing to make ourselves more competitive." As the three of you listened to each other, what are the areas of common ground that you heard in one another's testimony?

Mr. JUREY. I will start. One of the things that I will acknowledge quickly is, they both face intense competitive pressures, and many of the regulatory policies of the United States don't necessarily help them, and then there is reality. We have a company that I didn't talk about, Progressive, to an extent, the one trying to find the machinists. They are paying $86,000 a year to a starting machinist. They will quickly get them to $106,000, and when they get them trained at that level, their competition comes in, gives them a signing bonus, a higher salary and takes them away, and their comment was, "We want as good corporate citizens to keep this job and this work in the United States, but if you continue to not be capable of producing the machinists we need and the wages continue to escalate, there will come a time when even that enhanced U.S. productivity per worker will meet a certain mark and I am going to have to be forced to do something different to remain competitive." And so again, if you look at the way we spend dollars, you have got an apprentice program at the Department of Labor that has almost no money to spend, and yet the minute you put people in an apprenticeship program, they start getting industry wages. There is a great return on the dollar spent to assist industry with the cost of getting highly trained, competitive people who can create that level of productivity.

Mr. BAIRD. Mr. Jurey, what you are saying is music to my ears. I founded the Career and Technical Education Caucus in the Congress. I just would ask you to not repeat this in front of our staff lest we lose a number of fine young people to career and technical fields like machinists because they will make more money doing what they do there than they do here.

Mr. JUREY. Well, every time I have announced that salary, people come up and give me cards and ask me where to apply, and the reality is, that is where the job market is going, and we do need to think differently about how the United States supports industries like the two on the panel with me. I simply think you also have to take into account the fact that we are forced to compete in a global economy, and pretending otherwise won't make a difference, won't change that.

Mr. BAIRD. Thank you.

Mr. O'Shaughnessy or Mr. Copland, any comments?

Mr. O'SHAUGHNESSY. I think job training is an important factor, but I think it comes after some of the basics, and the basics start with your costs and the costs of your competitor, and if currency manipulation has an impact of 40 percent on your costs and value-added taxes has an impact, an average worldwide of about 20 percent, put them all together, that is 60 percent, those two. If health

care costs, they are 10 percent of Revere's costs, now you are up to 70 percent.

Mr. BAIRD. It is a tough margin to beat.

Mr. O'SHAUGHNESSY. It doesn't really matter whether there is anyone trained or not; we are out of business and now we are going to increase the energy costs by probably 30 percent in this country but not in others.

Mr. BAIRD. Is it your feeling, Mr. O'Shaughnessy, that the things the other panelists, the issues you have just addressed are not adequately dealt with in our trade negotiations?

Mr. O'SHAUGHNESSY. Sir, they are not dealt with, period, in our trade negotiations.

Mr. BAIRD. Any dispute of that?

Mr. JUREY. I would concur with that. I made two points. It is a competitive workforce and it is the total cost of doing business environment they have to compete in, and that is a legitimate part of that total cost of doing business. So if you go back to one of his comments about consumption tax, look at the taxation factors that really are a part of the cost of doing business. If you are taking a company that has high capital costs and your tax environment primarily taxes wealth or capital investment, then that is a disincentive to that company. On the other hand, if a company's costs are primarily in production and you have levied a high production cost, you have handicapped their competitiveness. And so if you don't think about tax policy as it impacts their cost of doing business and if you don't think about the tax policy internationally that either helps or hinders the global competition, then we aren't going to be able to enable the kind of true competition we need for the U.S. companies to remain competitive.

Mr. BAIRD. I actually concur with both points, and one of the frustrations I have about our trade policy, and I spoke with Susan Schwab about this a few days ago and spoke with members from the machinists' union just yesterday, is we tend to battle it out over yes or no Colombia, yes or no Peru, yes or no Panama, but we neglect all these other structural factors of our own society, and the focus so becomes on the trade agreement yes or no that we neglect our tax policy, our education policy, our currency policies, et cetera, and I think ultimately to solve this—and whoever the next President is, Democrat or Republican, we are not going to solve this country's financial situation unless we take a comprehensive, integrated approach. And by the way, the President doesn't write the laws, this body does, so we can look to that President, but the fact is, it is the next Congress that needs to address a comprehensive approach, not just a trade policy but an economic policy writ large, and I very much value the insights of the gentleman and yield back to him.

Chairman MILLER. Thank you. The buzzers that you heard earlier were Mr. Baird and me being called to a vote, and we now need to go vote. It will probably take us 20 minutes, perhaps a half an hour. And so if you all could be at ease for a little bit, we will go vote and come back and reconvene. Thank you.

Mr. BAIRD. I may not be able to return, but I am very grateful to both panels for their insightful testimony. Thank you very much.

[Recess.]

PREDATORY PRICING

Chairman MILLER. I think we are probably close to the end of the hearing. I apologize for making all of you wait for so long so close to the end of the hearing. I do have a couple questions for various members of the two panels. Most antitrust laws are designed to keep prices low. An exception to that that I remember from law school and from the early years of my practice when I actually did a little of that was predatory pricing, where a large company set prices that were below their cost, certain in the knowledge that they could outlast their smaller competitors, and when the smaller competitors went out of business, they would be able to set their prices at whatever level they wanted to, whatever the monopoly price would be rather than the competitive price. A lot of the economists point out, those who are strong advocates for free trade, not apostates, that a lot of the benefits that Mr. Copland described and Mr. O'Shaughnessy described and others of you as well that the Chinese have in particular—the currency manipulation, the free capital, getting free land, free building, free machinery—all that is free capital, is actually a cost and they are selling to us below cost, below what it costs their society at least. And that if a country wants to sell us goods at below cost, we ought to let them. That is a bargain for as long as it lasts, but eventually they will have to raise their prices.

Mr. Copland, when the day comes and the Chinese correct or let their currency float and stop giving free capital to Chinese textile manufacturers, are you going to be in business?

Mr. JAMES COPLAND. First off, are you going to guarantee that they are going to change their currency policy and they are going to change the stuff you are talking about?

Chairman MILLER. Well, if they do.

Mr. JAMES COPLAND. Oh, if they do.

Chairman MILLER. Are you sure that you are going to be——

Mr. JAMES COPLAND. Are we going to be in business? Well, let me tell you, it has been extremely difficult. It has been like a nightmare what we have had to face. Our business was the curtain business. We were the big player in the United States for it and actually we had extremely high market share because we were the best. That is why we had that market. And they came at this market starting in 2001. China had about seven percent of the import market, and the total import market on our goods was only about five percent. What has happened in that seven-year period is that China's imports went up 6,900 percent on the type of goods that we make. China has got 90-plus percent market share. Let me tell you something, the total market is offshore goods. The total market today is 98 percent offshore goods. So what do we have to do? I mean, what we are doing, that market is gone. They are selling this stuff not below cost, they are selling it below our raw material cost to be able to do it. This is the subsidies that you are talking about. This is the predatory pricing that you are talking about. How do we survive? It is a sad way to have to survive. We are picking up the pieces when somebody else goes out of business. We have competition go out of business, we pick up a piece and believe you me, just as soon as you get into it, here come the Chinese

again. We look constantly for something that the Chinese are not doing, that they haven't focused on yet or we are looking constantly for something that may have some natural barrier to them coming over here, a time thing or so on. But remember, everybody in our industry is doing the same thing, everybody. There have been 550,000 jobs lost in my industry since 2001 alone. Manufacturing in my state, North Carolina, has lost 28 percent of the manufacturing jobs. We have lost 19 percent nationwide, folks.

You ask, are we going to be able to do it? With every ounce of energy I have got, with every ounce of energy that my son has got and our wonderful workforce, loyal workforce we got, we intend to do it. We intend to be here. But I am going to tell you, that if this thing doesn't stop, there are going to be no survivors that have manufacturing in the United States, and I will not put my manufacturing in the People's Republic of China. I will not put it in any foreign country. I have a loyal workforce. They are part of my family. I speak of them as though they are part of my family and I will tell you under no circumstances will I export their jobs, will I put them out of work for my own personal gain. But I intend to, if the Lord gives us the strength and we get any decent break at all, we will make it.

Chairman MILLER. Anyone else? Dr. Gomory.

Dr. GOMORY. Yes, I want to talk to the notion that when they have wiped out the competition and then they raise their prices that you can get back in. I mean, that may be some form of economics but it is not the real world. In any business, either low tech or high tech, there is an immense amount of know-how, and when you lose the know-how, you are out of it. You are also not an isolated thing. You depend on a chain of people who get parts for you and they are not there anymore, and the idea that when the other guy is finished killing you, you can rise from the dead, just—that is a piece of—that is on paper, but in the real world, it is complicated. You are very dependent on things that have gone away. You can't do it.

Chairman MILLER. Dr. Scott.

Dr. SCOTT. Well, listening to Mr. Copland, it really strikes me that there is a certain measure of discretion that people have when they are running a company. He could have changed his mind and said, "Guys, I am in the nickel and dime business, shut the business." There aren't very many people like Mr. Copland any longer. One of the reasons is what is taught in business education across the entire country has changed and that also changes beginning at the end of the 1970s or the beginning of the 1980s. Just pick one, the one that I happen to know, but our school was founded, the dean said the mission of the school is to teach people to earn a decent profit in a decent way. That is a question, it is not an answer, but business schools don't do that anymore, and the change, teaching a decent profit in a decent way, you could pass for saying we are going to teach officers that have some loyalty to a broad range of things. We start doing the other and what we are doing is teaching mercenaries. We are teaching mercenaries. No mercenary is going to pay attention to his concerns at all and they are going all through the establishment with a new calculus that says, "Hey, in order to be effective, you have got to be able to reduce it to one di-

mension or you can tell that three is bigger than two." The sense of responsibility that ought to be there isn't there, and we are generating them. I am sure that this is an exception where they don't do that but aside from Vanderbilt, it is all over the country.

Mr. JAMES COPLAND. Let me make another statement about this in regard to what was said just a minute ago. Mr. Chairman, you said whenever they get enough and they are going to raise their prices, this business is not going to come back to America. Let me tell you about the textile business. When these plants are closed down, they are closed. The equipment—if you don't run the equipment, keep it up, it deteriorates to nothing anyway, but the equipment is being sold. Pakistan is buying the equipment. People are selling it for five cents on the dollar. Nobody wants it. And let me tell you what is happening to the buildings themselves. I was just down in Joanna, South Carolina, a huge mill down there has been closed five years. They are tearing it down. They are doing it all over the South, tearing the mills down that are closed. Why? They are going to sell the bricks, guys. They are going to sell the beams. They will sell the bricks and sell the beams. So don't think that you are going to be able to say, "Oh, boy, as soon as this thing is over, here we come back," it is going to be regeneration. All we are trying to do is to hold onto what we have got, and if we don't wake up and start paying attention to these trade agreements that we are making and pay attention to the fine points of these trade agreements, we are going to give it all away.

Let me give you one example. We just talked about CAFTA, and that is not too long ago, CAFTA. It sounded like a good idea, all right, going to make it in the United States, going to make it in Central America, everybody is going to be okay. They left a loophole. The loopholes are what get us and so many times our negotiators don't even know that the loopholes are there because they are some political appointee that hasn't done it but about six months or three months or they have been out of college for about a year. They don't even know the loopholes are there. They do know when they do it, woe be to them. Let me tell you something. They had a deal in there to where they could take pocketing, so that doesn't sound like much. That is not sounding like much. Let me tell you something. Pocketing is a 180-million-yard business in the United States, pockets for trousers. It is a United States business, and they had it in there and said, "Well, you know, we are going to make an exception on pocketing and we are going to let these Central American countries make this stuff out of Chinese cloth." Dominican Republic wanted that. They gave it to them. We pointed it out and said, "Look, you are going to destroy the industry." "Oh, no, oh, don't worry, we are going to fix it, we are going to fix it, we are going to fix it, trust it, we are going to fix it." That was three-plus years ago, folks. It hasn't been fixed. There has been nothing done. Let me tell you the end result of that thing. Eighty percent of that market is gone, and it is gone, folks. Eighty percent of it is gone. Haines Finishing Company in Winston-Salem closed down 75 percent of their business, closed it down. They have been there longer than we have. Allis Manufacturing Company closed down four plants down in South Carolina. You have got

Mount Vernon, they lost 70 million yards worth of business, closed plants in Rome, Georgia, closed plants down in Texas.

We have got to start paying attention to what we are doing with these trade agreements. We have to get some people that know what they are doing with these trade agreements. We are being out-negotiated. We better start paying attention to what we are doing because let me tell you something, we are exporting the wealth of this country as fast as we can export it today. It is going offshore. We are going to pay one tremendous price in this country.

Chairman MILLER. Dr. Gomory.

Mr. GOMORY. I really want to comment on that because first of all, I am in wholehearted agreement, but I think it is very difficult to work out a set of agreements which are that detailed. It is also very difficult to counter the next mercantilist policy which may be loophole 47, all right? The reason why I think we should seriously consider the Buffet certificate program is because it measures results, not how you got them. The Buffet proposal, if you can't export, they can't import, however tricky they are and whatever the deals are. It is not trying to match, you know, their currency manipulation with our currency manipulation or their loophole with our loophole or their subsidy with our subsidy. It says, "Okay, kids, if you want to ship stuff in, we have got to be shipping stuff out and it is not nation by nation." This I think is an approach which needs to be taken very, very seriously.

Chairman MILLER. Mr. O'Shaughnessy.

MORE ON FREE TRADE

Mr. O'SHAUGHNESSY. I have two problems with the trade agreements in general that we have negotiated. The first is, trade agreements are designed to lower tariffs. That is what they are about. But the problem is, because of our tax system where we are the only major country in the world that does not have VAT taxes, VAT taxes are like a tariff but they are exempt from trade agreements. They are exempt by WTO rules. And so what happens is that you can look at a chart in my written testimony, about how European countries have lowered tariffs, normal tariffs, and they have increased VAT taxes and their total tariffs are the same. So they don't even work on that side.

The second problem I have with the free trade agreements is that the focus is wrong. And you see, to put together a patchwork of trade agreements to solve our trade policy, to solve the loss of the manufacturing jobs, and the loss that we are going to see in the service sector—we are going to lose way more jobs in the service sector than we have lost in the manufacturing sector—we have to design a national trade strategy or policy from the top so that when we consider things like environmental standards, we think about the impact on our own ability to produce goods and services. When we consider energy policy, we will think about that. When we consider tax policy, we will think about that. And when you layer all of these things together, that is very critical and that is what is wrong. Our focus is wrong by looking at trade agreements without having the framework to negotiate them from.

Mr. JAMES COPLAND. Let me just say this about the tariffs, you brought up about the tariffs. You know, we make these trade

agreements and today the average tariff in the United States, this is the average of United States tariffs: 1.7 percent. That is not much, guys. You turn right around and you look at the tariffs that the other countries have that we have these agreements with and they average 30 percent. Is that fair? Is that a good deal when you negotiate something like that? No, you can't tell me it is. Let me tell you something. China today, they have—under the rules, they have the right to designate themselves as an underdeveloped country, China. They've got the biggest international trade in the world but when you are designated as an underdeveloped country, you can charge anything you want as far as tariffs on stuff coming in there in addition to these value-added taxes like has been brought up. Is that fair? Is that good negotiations? Are those good trade deals? Is that good for America? Absolutely not.

Chairman MILLER. Mr. Jurey.

A COMPREHENSIVE SOLUTION

Mr. JUREY. I guess a point I would make, a lot of good comments have been made, but I would encourage the panel, the Committee to think this way: there is going to have to be a comprehensive solution. It is not as simplistic as taking any one of these suggestions. At one point I remember a key member of your staff said, "Well, could you cite in your testimony what specific clause we could change to deal with your point?" And I said I wish it were that simple. I wish I could say that if you simply change article 3, section 2, paragraph 9 under WIA, all these things would go away, but the reality is, the entire law is structured in such a way that you are going to have to rethink all of the processes and all of the measurements and how they impact the competitiveness of all these companies. And in a similar way, you are going to have to think about the broader aspects of these free trade agreements because there are components that challenge the men at this podium but you can't simply take one component and change it and think you have solved the problem.

The broader issue really is, we don't have a comprehensive economic policy to deal with global competitiveness. It has got to be multifaceted and there are some aspects of global competition we are not going to be able to change and there are others we can. And if out of this you can begin to think about the things that you can impact—and as one of your colleagues said—you are the group that writes the laws, if you can pull out the parts that you can have an impact on and look at it in a more comprehensive way, I believe you could make significant progress in enabling these companies to remain and be very globally competitive.

Chairman MILLER. Dr. Scott.

Dr. SCOTT. The main ideas are the same as the one for the domestic, and by the way, the increasing inequality in the United States comes after 1980—from 1945 to 1980 the fraction of the income being earned by the top 10 percent in the United States does not change for 35 years. The change is since 1980, 1982. By the same token, this is not coming from globalization. Europeans are not experiencing the same problem at all that we are. It is here, it is since 1980, and we are very close to being back to the income distribution that we had at the end of the 1920s. The common de-

nominator is, we have deregulated domestically at the same time that we are trying to deregulate internationally and the universal principal has been to deregulate. And it is like my little green box, it is exactly the same thing: "Hey fellows, we really don't need to regulate, we can use the common resources without really having to figure out what we are going to do, it will solve itself automatically." Well, it isn't and it won't as you do this, but that is a very big job because you'll find that being taught, not in the business schools, but at the economics departments in this country everywhere. It is very, very different when you get to Europe. My big personal luck was somebody that is a publisher in Germany happened to call and ask, "Are you publishing a book? Tell me about it and hey, we will publish it." Because they really teach economics that is grounded in history in Europe, in Germany, in France and in Scandinavia. We don't.

Chairman MILLER. The other Mr. Copland, Jason Copland.

Mr. JASON COPLAND. I wanted to expand upon and agree with Mr. Jurey's comments, just about the whole need for a comprehensive trade policy. Just something that is going on real and right now that I thought would be interesting to hear about, Chairman Miller, is the recent Farm Bill, and I want to give a very concrete example. We have had kind of a disjointed trade policy where sometimes we sign free trade agreements with countries for political reasons or sometimes reasons I can't even figure out other than the fact that maybe we just want to sign as many free trade agreements as possible. But then sometimes we also try to create these regional trading blocks, and that was really the intent behind NAFTA and CAFTA, that we would be able to use our technology and our productivity and then utilize other countries' less expensive labor and then you would have that rising economic tide that would both help the United States and Mexico and our Central American partners.

Well, in the most recent Farm Bill, Charlie Rangel put out a Haiti add-on to that Farm Bill where it kind of destroys that entire concept. In North America we are going to have a trade bill with Haiti that is part of the Farm Bill that just specifically with textiles will have absolutely no rules or regulations whatsoever and will allow fabrics to come in not just from the regional trading block but from China. And it is so sad that the economic condition that Haiti is in, but this just shows the lack of any type of a comprehensive trade policy and no one has thought that through. Well, if Haiti has that, what is that going to do to the Dominican Republic and what is that going to do to Guatemala and Nicaragua? No one thinks about that at all. And who it really is going to help is the Chinese, and it is really—you know, too many people want to blame China, and this is just an overall criticism of Washington, D.C. People like to point the finger at China, and I think that that is wrong. I think we should be pointing the finger at ourselves. It is not China's fault, it is our fault because we have let it happen.

JOB TRAINING AND COMPETITIVENESS

Chairman MILLER. The answers to my only question so far have taken 20 minutes, and I am not sure how important my questions are in the discussion now. We are close to the end, obviously not

to solving all the problems of the world or this problem but of the hearing at least and we will have further hearings on this topic.

I know that some of the first panel in the discussion of corporate governance talked about the model of corporate governance in which the corporation was not driven entirely by profitability but by other considerations and that a corporate board of directors could decide to locate manufacturing operations in the United States even if they would be cheaper somewhere else because of the effect on the community and out of loyalty to their employees and that the law should allow and even encourage that, but I wonder how well that generous impulse is going to work in guiding corporate behavior for the longer term, although perhaps you are right, there have been more generous impulses in the past than there have been recently.

I would like to hear a little bit about some of the other things we could do besides having more generous impulses guide boards of directors, and one that I have worked on a fair amount or talked about a fair amount is the need for training for workers to learn new skills very quickly, that we should have an advantage on the rest of the world in the ability to learn new skills quickly as manufacturing operations change fairly quickly. I visited Mr. Copland's plant. If you have seen the movie Norma Rae, it doesn't look much like that. We are developing new technologies quickly. I think one of the first panel's discussions of R&D being an advantage is if it is just R&D—if that is the only thing happening in the United States—it is not all that helpful. What we hope happens is R&D is applied in the United States at least first. At least for a while we will have a head start and then our workforce needs to be able to learn the skills quickly to use new technologies.

I attended a panel discussion earlier this week organized by the Business Roundtable. They did't invite me to talk about executive compensation but they did invite me to talk about community colleges. Mr. Copland knows the role that—both Mr. Coplands know the role that community colleges play in North Carolina and perhaps how much more of an advantage it is to North Carolina business than in other parts of the country. In other parts of the country, community colleges began as academic institutions, as essentially a junior college, and in North Carolina they have always been technical job skills-driven and there is a close relationship between the business community, business leadership, and the community colleges to develop curricula for specific job skills. The leading employer in Alamance County is no longer Mr. Copland's company or Glen Raven Mills or Burlington. It is LabCorp, the Nation's second largest medical testing firm, and Alamance Community College has a curriculum in medical testing developed in consultation with LabCorp and LabCorp hires every one of the graduates of that program, at least the ones that don't take another job with somebody else and actually get a better deal out of it.

Mr. Jurey, what is the role of community colleges or job training in our ability to compete and keep jobs in this country?

Mr. JUREY. I think it is critical, and I will give you one clear anecdote that speaks to what you have said about community colleges. In the mid-1990s, I was in El Paso. The Texas Workforce Commission committed considerable dollars, every hospital com-

mitted considerable dollars, to that community college to expand the only nursing program within 200 miles. We had 12 percent unemployment. We had hospital CEOs going to India and China to recruit nurses and finally persuaded the board to go along with the need to expand the program with 200 on its waiting list. Along came a new college president who called me and said, "I decided we are going to open a beauty college and put a hold on the nursing expansion," and when I got up off the floor, I said, "Could you tell me why? There are six for-profit beauty colleges in our community, none have a waiting list. They pay below median wage. Nursing pays a very high above-median wage. It is a huge demand and you are taxpayer supported and we thought you were going to meet the demand needs of industry. And he still was unwilling to bend and so I said, "Fine," went back and talked to my board and they said, "You are going to organize a tax rollback election," since he announced something like a 30 percent tax increase. The next day the College Board of Trustees Chair called me and said, "I thought we were partners." I said, "So did I, but all we ever asked you to do was listen to the actual needs of the employers and you have quit doing that." He quickly called the board together in closed session, asked me to recite my discussion with the college president. At the end of it, he looked at the board and they nodded and he said, "Can we have 24 hours to reason with our new president?" I said "Well, yes, sir." He called me the next day after reasoning with him, "He has resigned, can you get that money back on the table?" And to me, that is a very responsive community college system because the board of trustees took seriously their need to think about the role they played in providing the kind of training necessary to keep key sectors competitive.

Then if you back up into the regulatory process side, as I discussed, and you start really digging deeply into how quickly can local workforce boards and community colleges deploy WIA and DOL dollars to meet those needs, when employers are faced with having to get speed to market and rapid response to changing market conditions, it is extremely cumbersome. It is very difficult to do outside of the box. It is hard to help employers retrain incumbent workers to get higher skills to quickly meet those changed needs because the slant in the law is toward entry-level job seekers, and yet if you don't move incumbent workers up the ladder, there are no entry-level jobs for the job seekers to seek. And so again, I keep trying to stress, you are going to have to think a little more comprehensively if you really want to help all these companies remain competitive and think about the impact not just of one change but to how systemically we can provide the type of incentives and assistance and help, particularly in having a highly competitive trained workforce that these employers need. And one last comment. If they need apprenticeships, there are no dollars to pay them in the program.

Chairman MILLER. Mr. O'Shaughnessy.

Mr. O'SHAUGHNESSY. Yes, thank you, Mr. Chairman. I have to catch a flight so I would like to comment. Thank you. I think the issue of education and training is a very important one. However, I think it is necessary to put it in perspective. I often read articles about we need to encourage more of our young people to study en-

gineering. The way we are going, it really isn't going to matter because there is not going to be anywhere for them to work that needs that kind of work. The factories are going to be shut down. The service jobs are going overseas. Because of factors like 40 percent of our costs are due to currency manipulation, 20 percent taxes, 10 percent health care. That is 70 percent. If you don't deal with those issues, and then we add on energy costs, another 10, environmental costs, another 10, we have got a 90 percent cost problem. I want to solve those problems so that we have jobs for well-trained people, and to train people when they lose jobs, to focus on that, well, I don't know where they are going to go. I think we are in a much more serious problem than any of us realize and we won't realize it until the service jobs start flowing overseas. Allen Binder, the former Vice Chairman you quoted, also said that he expected to see 30 million service jobs go overseas in the next few years.

Chairman MILLER. Dr. Gomory.

Dr. GOMORY. I would like to go back to your point about what we were saying about corporate governance. By the way, I am very supportive—we have done a great deal of work on community colleges. I think they are vital, great training grounds. Sometimes they are confused about whether their place is to train people for higher education or for jobs. I think in corporate governance, we certainly mentioned liberating directors to consider more than profit, but I also think we should seriously entertain the notion of rewarding companies that create and keep high-value jobs in the United States so that when they have this generous impulse to locate the jobs here, they are doing a service to the country. They are adding to our GDP. Let us give them something for doing that. That is what all the other countries do. They say, "Come here, add to our GDP, we will give you profit in return." Why can't we say that too? And that is why I suggested just one example, a corporate income tax graded by the value add of the people in the company. But there are other ways. I think we have to realize that when companies create jobs here and especially those that are productive, they are already doing a service for the country before they pay their tax, and we need to take that into account.

Chairman MILLER. Mr. Jurey.

Mr. JUREY. I would support that in this way. The market responds to incentives, and if you think about how to incentivize those kinds of behaviors in ways that also enable companies to be highly cost competitive, that can be very effective as part of a strategy.

Mr. JAMES COPLAND. As far as——

Chairman MILLER. I almost said that I wanted the record to reflect that I asked a question and no one named Copland had raised their hand to respond. Mr. Copland.

Mr. JAMES COPLAND. Thank you, Mr. Chairman. First off, let me say that as far as job retraining and education, I am totally in favor of it. It is a wonderful thing and we do in the State of North Carolina have a tremendously successful community college system. But it can only go so far. It can only go so far. You talked about my county of Alamance County and LabCorp and what the Chairman said is true. We have had 40 percent of the people in my

county—40 percent of the manufacturing jobs have been lost. LabCorp can't hire all these people. LabCorp hires them but they can't hire all those people at all. Only a fraction are they able to hire. And if you look right down the road to Cabarrus County, North Carolina, down at Cannon Mills, Pillowtex, what was it, four years ago they went out. Five thousand people lost their job all at one time. Today only 60 percent of those people have found any job at all and they have got a wonderful community college system. So there has got to be a blend. You have got to have both. You have to take into consideration everything, and job retraining and education is part of the answer, but it needs to be a comprehensive program, as has been brought out here today.

Chairman MILLER. I have been called for another vote and I think we are probably then going to end the hearing. I encourage all of you to keep talking among yourselves. When you get it all worked out, I will introduce the bill that solves all the problems.

Mr. JAMES COPLAND. Do you promise?

Dr. GOMORY. I really want to thank all of you for organizing this. It has been very worthwhile, and we are talking about some things you don't get to talk about everywhere. I appreciate it.

Chairman MILLER. Well, it obviously—these are topics that we need to talk about more.

I want to thank all of the panelists for appearing including Mr. O'Shaughnessy, who had to leave now to go get on a plane, but thank all of you and I appreciate all of the perspectives that are not typically part of this debate. But perhaps given the consequences of this debate, we need to step back and think about what are some of the assumptions that have gone unchallenged but should be challenged.

So again, thank you for appearing, and we are now adjourned.

[Whereupon, at 1:12 p.m., the Subcommittee was adjourned.]

Appendix 1:

Answers to Post-Hearing Questions

ANSWERS TO POST-HEARING QUESTIONS

Responses by Ralph E. Gomory, Research Professor, New York University Stern School of Business; President Emeritus, The Alfred P. Sloan Foundation

Questions submitted by Chairman Brad Miller

Q1. You say in your written testimony: "If in the process of globalization the production (or delivery in the case of services) of the good moves overseas, so do the wages. Even if R&D remains behind, the vast bulk of value creation has moved to another country, and it is there that it supports the wages of employees." But if production moves offshore, how long can R&D remain behind? Particularly in high-value-added industries, has there been any evidence that R&D activity is drawn toward the geographic location of manufacturing capacity? Conversely, are there circumstances in which R&D activity has drawn manufacturing capacity to its geographic location?

A1. In the case of established products R&D is very likely to follow production. In disc drives and semiconductors or similar advanced and difficult products you need the R&D people to be intimately involved in the details of production in order to know what is actually possible and what is needed.

If you are talking about a totally new product, and this is the picture that is too often in peoples" minds, there is no production to follow and initial production could be set up anywhere depending on a great variety of circumstances. However if the new product becomes established and large scale, production location will often be dictated by costs and thereafter R&D will eventually follow production.

However, at any given time, most production is in established products.

Q2. In your written testimony, you say that "the emerging gap between the goals of global corporations and the aspirations of people of individual countries"—a gap arising from "rapid technological change" and its consequently increased "degree of globalism in economic development"—has accelerated "not only in the United States but also in less developed countries." You add: "Even when globalization increases a country's wealth, which it does not always do, most of the gains are going to a thin upper crust, and the bulk of the people do not participate." What does this augur for the future of a world economy that, in recent memory, has depended for its sustenance on the production and sale of goods of mass consumption?

A2. This is really a quantitative question whose answer is not obvious. In the U.S. the growth of wealth in the upper crust has been extremely rapid, the growth for most others zero, i.e., some negative some slightly positive, all greatly below the rate of growth of GDP. It is difficult therefore to extrapolate into a rather far off future when the number of people is growing.

Q3. During a discussion of whether executives' severance and retirement packages drain lower-ranked employees' retirement and other benefits, Dr. Blair was asked about the "merit [of] tying the fate of employees' benefit packages to the fate of the executive or board packages." You agreed with her endorsement of the idea "in principle." Can you envision some ways in which this might be put into practice, and what hindrances or limits might exist?

A3. I do think this is a good general direction, not only for benefit packages but also for the general use of profit. Profit represents the available surplus after standard expenses are met. How should this be allocated, all to shareholders, all to workers as a bonus, split between the two, used to improve pensions? The possibilities are endless. We need to decide what we want of our corporations. This may be left to the boards of directors after first limiting the shareholder share. This is more a direction thing than an explicit rule and different companies might act differently and a tax structure is needed in the end to incent this sort of behavior. If this level of response is not helpful I have nothing further to respond to this question.

Q4. You said that "we as a nation . . . ought to decide what we want a corporation to do" and "make sure that our tax structure awards that." You also talked about not allowing firms to keep the profits they earn "if they are not productive, if they don't treat people right, if their skew of compensation is crazy." In addition to the tax regime you proposed that would reward firms for keeping high-value-added jobs in the country and punish firms for moving them offshore, can you offer specific measures for incentivizing desirable corporate behavior?

A4. Taxes are the most obvious method. In addition corporate charters that require corporations to consider the Nation, the employees and the community as well as the shareholders. Incentive pay should reflect all these factors. At present the use of huge stock option grants has skewed the attention of management, which was once focused on other factors as well as share price to focus on share price only as the reward, is tens and hundreds of millions of dollars. This skewed motivation should be changed and the executives should be rewarded for performing in many factors. Share price became especially attractive when the stock market was rising as every company went up whether well managed or not. It was rewarding the executives for being in charge during good weather. I suggest that it would be better for even the component of compensation that is tied to share price should be tied to a peer group comparison. This would motivate executives to build companies that could survive bad times as well as rise with the rising tide.

ANSWERS TO POST-HEARING QUESTIONS

Responses by Margaret M. Blair, Professor of Law, Vanderbilt University School of Law

Questions submitted by Chairman Brad Miller

Q1. You offered while testifying to expand upon "how and why the notion that corporate managers must maximize share value came to be so widely accepted in the past three decades." Please do so here.

A1. Societal norms, conventions, or expectations rarely change overnight, and that is certainly true with respect to the question of the purpose of corporations, and what corporate managers and directors are expected to do. Throughout the history of the use of the corporate form as a way to organize business activities, there have been societal debates about whether corporations should be regarded as creatures of the state, required to serve some public purpose, or whether they are purely the product of contracts among private parties, whose only purpose is to serve the interest of those parties, presumably by earning profits for investors.

For most of the 20th Century, until at least until the late 1980s, the question was thought by most corporate law scholars, as well as most business leaders, to be settled in favor of the view that corporations are supposed to serve a broad social purpose (while also, of course, earning profits for investors).[1] This "social entity conception," as this view has been called, came to be widely-accepted in the 1930s, partly as a reaction to widespread concerns about the role that corporate abuses had played in the financial excesses of the "Roaring 20s," and in the collapse of financial markets in 1929 and the ensuing Depression of the 1930s. The social entity view was accepted by most economists and legal scholars partly as a result of the scholarship of Adolph Berle and Gardiner Means, who, in 1932, found that most large corporations did not have a "controlling" shareholder (an individual or other firm who held 50 percent or more of the voting shares) who could be held *accountable* for the actions of the corporation.[2] Instead, shares had come to be very widely-held by individual investors, so that in many firms, managers and boards of directors were not constrained to act only in shareholders' interest. If shareholders could not be held accountable for the actions of corporations, Berle and Means argued, it made no sense as a matter of public policy to hold directors and managers responsible for serving the interests of shareholders.[3] Instead, they argued, directors and managers should be required to manage corporations in the public interest.[4]

During the years of World War II, and the post-War expansion, the interests of the corporate sector seemed to be very much aligned with the interests of the country.[5] Thus business leaders could credibly proclaim that "what is good for the coun-

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[1] For a discussion of the economic function served by the corporate form that made it attractive to business organizers in the 19th Century, as compared with the partnership form, see Margaret M. Blair, Locking in Capital: What Corporate Law Achieved for Business Organizers in the Nineteenth Century," 51 *UCLA Law Review,* 2, 387 (2003). For a general discussion of the history of legal thinking about the role of corporations, see Margaret M. Blair, *Ownership and Control: Rethinking Corporate Governance for the Twenty-first Century,* Brookings (1995), Chapter 6, Whose Interests Should Corporations Serve? pp. 202–234.

[2] See Adolf A. Berle, Jr., and Gardiner C. *Means, The Modern Corporation and Private Property,* 1932.

[3] "The owners of passive property [dispersed shareholders], by surrendering control and responsibility over active property, have surrendered the right that the corporation should be operated in their sole interest," Berle and Means asserted. Berle and Means, 1932, pp. 355.

[4] "Eliminating the sole interest of the passive owner, however does not necessarily lay a basis for the alternative claim that the new powers should be used in the interest of the controlling groups [corporate managers and directors] . . .. The control groups have, rather, cleared the way for the claims of a group far wider than either the owners or the control. They have placed the community in a position to demand that the modern corporation serve not alone the owners or the control but all of society." Berle and Means, 1932, pp. 355–356. William Allen, former Chancellor of the Delaware Court, described the "social entity" view in a law review article as follows: "Contributors of capital (stockholders and bond holders) must be assured a rate of return sufficient to induce them to contribute their capital to the enterprise. But the corporation has other purposes of perhaps equal dignity: the satisfaction of consumer wants, the provision of meaningful employment opportunities and the making of a contribution to the public life of its communities. Resolving the often conflicting claims of these various corporate constituencies calls for judgment, indeed calls for wisdom, by the board of directors of the corporation. But in this view, no single constituency's interest may significantly exclude others from fair consideration by the board." See William T. Allen, Our Schizophrenic Conception of the Business Corporation, 14 *Cardozo Law Review,* 2 (1992).

[5] Historian Dow Votaw, writing in 1965, observed that "the corporation performed brilliantly during World War II," and "the performance of the corporate system since the war has also been

try is good for General Motors,"[6] and courts did not worry much about whether corporate officers and directors who took into account the public good in their corporate decision-making would thereby breach their fiduciary duties to shareholders.[7]

This view of the duties of officers and directors of corporations changed during the late 1980s and 1990s. The change was the product of a new set of theories in economics and finance, in combination with dramatic changes in how financial markets work.

On the theory side, three developments were important:

First, economists began developing alternative theories about whether corporations would, in practice, always maximize profits (as basic economic theory generally assumes). If managers were not themselves substantial shareholders, theorists speculated, and if there were no controlling or dominant shareholders, then managers might tend to act in their own personal interests rather than in the best interest of the corporation or its shareholders, economists argued. This was seen as a policy problem as well as a problem with economic theory. To address this problem, economists developed "agency theory." Agency theory recognizes that a gap often exists between what shareholders would want and what managers might want, and it argues that corporate participants will develop a variety of contracting strategies that could be deployed to give managers incentives to act in shareholders' interest. Agency theory analyzes the effectiveness of various contract terms at resolving the "agency problem" or at least trying to minimize its costs.[8]

One of the most important theories to come out of the focus on agency problems is the idea that, if managers of a corporation do not choose actions that maximize share value, other investors will be able to acquire the shares of the company at a price that is discounted relative to the corporation's potential value, and in this way, get control of the corporation and fire those ineffective managers. Thus theorists believed that a market mechanism, the so-called "market for corporate control," would limit the ability of managers to diverge from share value maximization.[9]

Second, finance scholars came to believe in the "Efficient Capital Markets Hypothesis," which states that security prices in widely-traded markets, such as stock markets in the U.S., will quickly reflect all available information that might be relevant to the future performance of the company that issued the security. Prices determined in such markets will be an unbiased estimate of the true value of the security, according to the theory.[10] The beauty of this theory, from the point of view of academic economists and finance scholars, is that it implies that the financial performance of any company with publicly-traded shares can be measured quite easily and without systematic error simply by looking at what happens to the share price of the company's stock.

Furthermore, with a few "modest" assumptions (and this was the dangerous part), changes in stock prices could be interpreted as measuring the entire economic performance of corporations. The assumptions required are that all participants in the

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very good, as a whole, [producing] rising prosperity and standards of living." Dow Votaw, *Modern Corporations,* 1965, p. 102.

[6] Attributed to Charles E. Wilson, who was president of General Motors Corporation in the early post-War years, and later became Secretary of Defense. See *The New Dictionary of Cultural Literacy, Third Edition.* Edited by E.D. Hirsch, Jr., Joseph F. Kett, and James Trefil. Copyright © 2002 by Houghton Mifflin Company. Published by Houghton Mifflin Company, at *http://www.bartleby.com/59/18/whatsgoodfo2.html*

[7] In 1946, Frank Abrams, then chairman of Standard Oil Company of New Jersey, described the role of modern managers as maintaining "an equitable and working balance among the claims of the various directly interested groups—stockholders, employees, customers, and the public at large." See Eugene V. Rostow, To Whom and for What ends is Corporate Management Responsible? in *The Corporation and Modern Society,* edited by Edward S. Mason, 47–71, 1960. In the 1970s, General Electric C.E.O. Reginald Jones similarly argued that corporate leaders must balance shareholder concerns against the interests of employees, American industry, and the Nation. The Business Roundtable formally adopted a similar position in 1981. And as late as 1990, the Business Roundtable position was that "Corporations are chartered to serve both their shareholders and society as a whole." See Corporate Governance and American Competitiveness, Business Roundtable, March, 1990, p. 4. The Business Roundtable reversed its position in 2004, however, asserting that the only obligation of business leaders is to maximize shareholder wealth.

[8] See, e.g., Michael C. Jensen and William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," 3 *Journal of Financial Economics* (October) 1976.

[9] See, e.g., Henry G. Manne, Mergers and the Market for Corporate Control, 73 *Journal of Political Economy,* 1965, and Michael C. Jensen, Agency costs of Free Cash Flow, Corporate Finance, and Takeovers, 76 *American Economic Review,* May, 1986.

[10] E.F. Fama, Efficient Capital Markets: A Review of Theory and Empirical Work, 25 *Journal of Finance,* May, 1970.

enterprise of a corporation except shareholders (lenders, suppliers, employees, etc.) are compensated at their (risk-adjusted) opportunity cost by complete contracts, so that all of the surplus economic value created by the corporation is captured by shareholders. Under efficient capital markets theory, and with these assumptions, stock prices came to be viewed as the single most important measure of total corporate performance—in fact, some scholars came to treat stock prices as essentially the only meaningful measure of corporate value.

The third theoretical innovation that helped lay the intellectual foundation for shareholder primacy is the development of mathematical models for estimating the value of stock "options."[11] The role of option pricing models is more subtle and complex, however, so I save the discussion of why it was important for later, when I explain why stock options became important.

On the financial markets' side, several developments helped change the general public perception and belief about the responsibilities of corporate officers and directors:

First, securities markets went through an extended period of time in the 1970s and early 1980s when returns on capital were abysmally low. As an indicator of this, from a peak of 1051.7 in 1973, the Dow Jones Industrial Average collapsed to 577.60 at the end of 1974, and did not rise above 1000 (to stay above that level) until early 1983. Bond markets also performed poorly during this period as inflation ate away at the real return to bond holders, and drove nominal interest rates to record highs by the early 1980s. By the 1980s, financial investors were willing and eager to try new things in order to improve the return on capital.

Second, several financial market innovations emerged in the 1980s that made it easier for outside investors to get control of publicly-traded corporations, to force changes in the management of these firms in order to improve returns on investments. The innovations were junk bonds, hostile takeovers, and leveraged buyouts. Investment banking firm Drexel Burnham Lambert demonstrated how investors could make outsized profits (seemingly without corresponding risks) by investing in portfolios of bonds that were rated below investment grade (Such bonds are called "junk bonds."). This created a substantial market for junk bonds, and made it possible for Drexel to underwrite the issuance of junk bonds by a new breed of market players who were willing make "tender offers" for corporations, even if existing management and boards of directors at those corporations believed that a takeover would not be in the best interests of the corporation and its various stakeholders. Tender offers made in the face of opposition by target company management are called "hostile takeovers." The outside investors who were making these junk-bond financed offers, pejoratively called "corporate raiders," were then able to buy up a sufficient quantity of shares in a number of companies to get control and oust directors and managers who did not want to go along with the plans of the takeover investor. These transactions (called "leveraged buyouts" because they were financed with large amounts of debt and relatively small amounts of equity) seemingly confirmed the new economic theories that predicted that if corporate managers did not maximize share value, other investors would come along and take over the firm to force the firm to maximize share value.

Thus the "market for corporate control" theory provided legitimacy to the "raiders" to the extent that what they were doing appeared to be consistent with what theorists had predicted, and the theory seemed to provide an explanation for why so many takeovers and leveraged buyouts were happening in the 1980s. Although most corporate directors and managers strongly resisted takeovers during the 1980s, over the course of that decade, the argument was repeatedly made that takeovers were the market's way of eliminating poorly performing managers and compelling corporations to restructure and redeploy assets to improve the return for shareholders. And because of the rarely-acknowledged or examined assumption behind the market for corporate control theory—that other corporate participants were fully protected by their contracts with the corporations—defenders of hostile takeovers argued that actions such as factory closings, layoffs, and asset sales that accompanied LBOs and led to higher share prices must be value-creating, and should be encouraged rather than inhibited by the law.[12]

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[11] See F. Black and M. Scholes, The Pricing of Options and Corporate Liabilities, 81 *Journal of Political Economy,* May–June, 1973.

[12] The full reality was more complicated. As mentioned before, the return on capital in the aggregate economy was dismal during the 1970s, so that investors had become restless and prepared to pursue new strategies to try to improve returns. Then in the early 1980s, the "cost" of capital (as measured by market rates of interest for bonds issued during that period) shot up to unprecedented levels, as Federal Reserve Board Chairman Paul Volcker promulgated policies to try to squeeze inflation out of the economy. During the period from about 1983 to about

Raiders and their fellow investors who were financing hostile takeovers in the early 1980s made very high returns on their investments. By the late 1980s, however, it became clear that too many deals were being done, and that some firms could not handle the high levels of debt they were taking on. A number of prominent firms that had been taken over in leveraged buyouts had to be reorganized or liquidated in bankruptcy proceedings.[13] Meanwhile, the return on capital climbed steadily during the 1980s, and by the late 1980s and early 1990s, and the cost of capital began falling again, suggesting that the underlying macroeconomic rationale that had fueled the takeover frenzy had largely worked itself out. Moreover, a number of states passed statutes in the late 1980s that made it easier for corporate managers to resist hostile takeovers. So by the early 1990s, we saw that the wave of takeover and leveraged buyout activity declined.

This did not seem to undermine the success of the new theory, however. Excesses of the old regime, in which corporate executives (who were more likely to see it as their role to grow the corporation rather than enhance share value) often engaged in wasteful empire building and indulged their desire to enjoy fancy offices and corporate jets in the absence of restraint by shareholders, had been exposed as epic takeover battles were fought.[14] And the seeds of the idea had been planted that corporate executives could provide substantially higher returns to shareholders if they were willing to abandon commitments their firms had made to employees, communities, and to long-term investments in basic research.

Thus, by the early 1990s, the culture inside the boardrooms had begun to change. Economists and finance scholars who bought in to the shareholder primacy perspective were telling directors that they should not believe that managers had intrinsic motives to do what was best for the companies, let alone to maximize share value. Rather, directors should monitor managers closely, and compensate them in ways that would give them large financial incentives to focus on share value. The most common way to do this was to grant large blocks of stock options to the executives.[15]

The rise to prominence in recent decades of stock option-based compensation, then, can be seen as the third development in financial markets that has encouraged widespread acceptance of the idea that it is the job of corporate directors to focus on improving share price. Stock option compensation is attractive to both the managers and the directors of corporations, relative to compensation in cash or even stock itself, because it provides substantial tax benefits to the corporation and to the executives receiving the options. If the strike price of a stock option is the same as the trading price of the stock on the day the option is granted to an executive, the company treats the grant as if it has zero cost to the company for accounting purposes. This means the company can record higher net profit than it actually earned because some true costs are not accounted for.

Moreover, if an executive receives stock options as compensation, the executive does not have to declare the option grant as income for personal income tax purposes at the time of the grant. As far as the IRS is concerned, the executive does not get the compensation until he exercises the options. At that point, the executive is credited with receiving income equal to the difference between the stock price in the market, and the exercise price which the executive pays to buy the stock. And

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1987, the aggregate cost of capital in the U.S. economy exceeded the aggregate return on capital, creating an environment in which it did not make economic sense for most firms in many industries to make further investments in new capital. Leveraged buyouts, of course, did not represent new investment by the buyout firms, since buyers were simply buying out the position of the previous shareholders, who could then redeploy their cash to other investments, such as government bonds, which were paying extraordinarily high rates at the time. Leveraged buyouts, thus, had the effect of preventing net new investment in the buyout firms, because after the buyout, all cash flows had to be used to pay down the debt, rather than to make new investments. The financial markets rewarded firms that restructured in this way because it freed up cash from corporate investment that could then be available to support the huge and growing federal budget deficits accumulated during the 1980s . Thus leveraged buyouts can be understood as a mechanism by which the financial markets forced the corporate sector in the U.S. to disinvest in the 1980s and 1990s. See Margaret M. Blair, "Financial Restructuring and the Debate about Corporate Governance," in Margaret M. Blair, ed., *The Deal Decade: What Takeovers and Leveraged Buyouts Mean for Corporate Governance,* Brookings, 1993.

[13] See e.g., Blair, *The Deal Decade,* at 41 for the story of Campeau Corp.'s leveraged buyout of Federated Department Stores in 1988,and subsequent bankruptcy filing by Campeau in early 1990.

[14] See, e.g., Bryan Burrough and John Helyar, *Barbarians at the Gate,* 1990, for a description of the excesses at R. J. Reynolds prior to its leveraged buyout by Kohlberg, Kravis, and Roberts, in 1988.

[15] One might imagine that, in a well-functioning market for executive services, cash compensation would be reduced by a substantial amount to offset the value of the grant of stock options to executives. But one would be wrong about that. Studies have repeatedly shown that stock option compensation awards seem to come on top of salary and bonus payments in cash.

the company then takes a charge against earnings (and corresponding tax deduction) for the cost equivalent to what the executive records as income.

During the 1980s, corporate directors and managers came to appreciate the fact that they could get extremely rich very quickly if their compensation packages included substantial blocks of stock options. And at the same time, the development of sophisticated models that could be used to estimate the value of options made the options seem less exotic and easier to understand. By the early 1990s, most corporate executives received more value in stock options each year than they did in cash compensation. This trend was given even more impetus by the boom in tech companies and dot.com companies of the 1990s, because such firms were typically low on cash, and high on promise, and thus often paid their executives very little in actual cash, but huge numbers of stock options.

Stock option compensation gives corporate executives exaggerated incentives to focus on stock prices, often over a relatively short period of time, rather than on other measures of corporate performance. This is because stock options are a "heads I win—tails you lose" proposition for corporate executives who receive them. If the market price of the underlying stock goes up, holders of stock options can get huge rewards, while if the price of the underlying stock goes down, option holders do not suffer corresponding losses. Thus stock options give corporate executives incentives to cause the company to choose highly risky strategies that may lose value on average, but that have a small chance at winning big. The executive will share in the winnings but not in the losses.

The net effect of these developments—low returns to capital in the '70s, the introduction of junk bond financing, hostile takeovers, and leveraged buyouts as mechanisms for squeezing higher returns for shareholders out of corporations in the 1980s, and the acceptance of stock option-based compensation packages for corporate executives—have made "shareholder primacy" attractive for corporate executives as well as for shareholders. Meanwhile, agency theory, the Efficient Capital Markets Hypthesis and options pricing models, have provided a gloss of intellectual respectability to shareholder primacy. Although corporate law in the U.S. has never required managers and directors to maximize share value, the restructuring of compensation schemes and the revision of corporate norms that has taken place over the last two decades means that it is now in the interest of most managers, executives, and directors, as well as of shareholders, to do so.

Q2. Can the holder of shares in a corporation be regarded legally as an owner of that corporation? If not, what differentiates a shareholder from an "owner" in the normal legal sense of the term?

A2. Although it is common practice in the media and even in occasional scholarly article or court cases to refer the shareholders as the "owners" of corporations, the structure and rules of the relationship between shareholders and the corporations whose shares they hold make it clear that, while shareholders own their "shares," they do not "own" the corporation itself.

Property, according to Barron's Law Dictionary, "describes one's exclusive right to possess, use, and dispose of a thing, . . . as well as the object, benefit, or prerogative which constitutes the subject matter of that right." [16] William Blackstone, in his 1765 treatise, stated that property "consists in the free use, enjoyment and disposal of all . . . acquisitions, without any control or diminution, save only by the laws of the land." [17] Property is also widely understood to convey responsibilities as well as rights with respect to the owned asset. Property owners can be held personally liable for damage to others caused by the misuse or neglect of their property.

Clearly, none of these characteristics apply to shareholders' role in corporations. Shareholders may not take possession of the assets of a corporation, or manipulate its machinery for their own personal benefit, especially if there are other shareholders. And by virtue of the doctrine of "limited liability," shareholders are generally not held personally liable for corporate debts, or for actions of the corporation that cause harm to others. Instead, the law creates a separate legal person when a corporation is formed, and that legal person is the owner of all corporate assets as well as the party that is held legally responsible for corporate liabilities and for harm caused by the improper use of corporate assets. Corporate officers and directors are charged with making decisions for the corporation, but since they are fiduciaries, they may not treat the assets of the corporation as their own personal assets.

Even where there is a sole proprietor who creates a corporation for carrying out his business activities, the corporate form is generally employed precisely because

[16] See Steven H. Gifis, *Barron's Law Dictionary, Third Ed.,* 1991, p. 380.
[17] 1 Blackstone, Commentaries on the Laws of England 134 (1765).

it protects the proprietor from personal responsibility for the debts and liabilities of the business. Just as in a corporation with multiple shareholders, the sole shareholder in a private corporation may not appropriate the assets of the corporation for his personal use, or intermingle the corporate assets with his personal assets, or he may lose the protective benefit of limited liability.

Ironically, some of the strongest shareholder primacy advocates concede this point. In their classic book, *The Economic Structure of Corporate Law,* authors Frank Easterbrook and Daniel Fischel argue that a corporation is a "nexus of contracts," not a thing that can be owned.[18] It is a legal mechanism that facilitates contracting among the suppliers of capital and the managers and directors. Easterbrook and Fischel nonetheless argue that the corporation should be run for the benefit of shareholders because, they argue, shareholders are the "residual claimants" to proceeds of the enterprise.

Shareholders are legal owners of the equity shares that they hold. They are entitled to the full set of rights and benefits that go along with ownership of the shares—they can receive dividends if paid, they can sell their stock, or borrow against it, or pass it to heirs. But it is a great distortion of the words "property" and "ownership" to argue that shareholders are the "owners" of the corporations themselves.

Q3. If corporate officers and directors are not required by law to maximize share value, what are their duties, and what should they try to do? And what constraints or incentives are available to make sure they do these things?

A3. Corporate law statutes provide that "all corporate powers shall be exercised by or under the authority of the board of directors of the corporation, and the business and affairs of the corporation shall be managed by or under the direction, and subject to the oversight, of its board of directors."[19] Beyond this, neither the statutes nor case law prescribe how directors and managers should go about their duties, except to make it clear that the they are in a fiduciary role with respect to the corporation, and must not appropriate its assets for their own personal benefit to the detriment of the corporation.

I have argued elsewhere that, in an ideal world, directors and managers "should understand their jobs to be maximizing the total wealth-creating potential of the enterprises they direct. In doing this, they must consider the effect of important corporate decisions on all of the company's stakeholders. For this purpose, stakeholders should be defined as all parties who have contributed inputs to the enterprise and who, as a result, have at risk investments that are highly specialized to the enterprise. Those parties inevitably share in the residual risk of the firm. The law and culture of the boardroom should support this broader view of the role of management and directors."[20]

This is, of course, much easier said than done. In practice, there are many reasons why corporate officers and directors might nonetheless try to manage the firm in a way that maximizes total wealth creation, even though it is difficult and often requires balancing competing interests. These range from financial benefit to themselves, to personal satisfaction, concern about their reputations, and social pressures. In the past two decades, however, the financial, reputational, and social pressures have all shifted so that they now generally encourage managers and directors to focus on share value to the exclusion of, and sometimes at the expense of, total value creation.

Can these sources of pressure be shifted back so that they push corporate officers and directors to try to maximize the total value created by corporations, instead of just the value that can be extracted by shareholders? That, it seems to me, is the major policy question at stake in this debate, and I don't know the answer. But it seems possible that a combination of changes in tax incentives, and changes in certain social and reputational factors might help. The following are a few suggestions along these lines:

- The tax system should not make it more attractive to use stock options in compensation packages rather than direct stock ownership.
- Tax benefits might instead be used to encourage corporate managers and directors to be compensated in restricted stock, with holding periods of at least

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[18] See Frank H. Easterbrook and Daniel R. Fischel, *The Economic Structure of Corporate Law,* Harvard University Press, 1991, pp.———.

[19] *Model Business Corporation Act,* §8.01(b). State statutes generally follow this language or other language to the same effect.

[20] See Margaret M. Blair, *Ownership and Control: Rethinking Corporate Governance for the Twenty-first Century,* Brookings, 1995, p. 239.

five to ten years. If officers and directors are rewarded for share price performance over long periods of time, rather than over a few months or quarters, this should encourage them to pay attention to the long run implications of their actions and decisions on all of the parties whose investments and effort contribute to the long run viability and profitability of the corporation.

- Shareholder primacy rhetoric should be continuously challenged, on the grounds that the law does not, in fact, require shareholder primacy, and that what is best for shareholders at any point in time is not necessarily what is best for the U.S. economy or for society at large.
- Changes in corporate or securities laws that would enhance shareholders' ability to pressure or compel corporations to accept takeover offers, or pay dividends, or take other actions that would benefit shareholders at the expense of the long run health of the corporation, should be avoided and even repudiated.[21]

The above changes might alter the cultural and financial pressures on officers and directors to some degree, but even if all were to happen, they would be unlikely to alter the massive economic pressures that are driving U.S. corporations to move their important investment and job-creating activities overseas. Addressing these pressures will require changes in tax and trade policy that are beyond the scope of this testimony.

[21] Lucian Bebchuk has argued, for example, that shareholders should have the power to initiate and approve distributions to shareholders in cash or in other corporate assets, and to distribute new debt securities to shareholders (to compel managers to pay out cash flow rather than reinvest it), to initiate mergers and/or consolidations with other companies, to initiate a sale of all of the assets of the company to a particular buyer, or to initiate dissolution of the company. See Lucian Arye Bebchuk, The Case for Increasing Shareholders Power, 118 *Harvard Law Review,* 3, 2005. These are all matters that under current corporate law are reserved to corporate directors. In prior work I have argued that any or all of the above changes in the law would be misguided. See Margaret M. Blair, Reforming Corporate Governance: What History Can Teach Us, 1 *Berkeley Business Law Review,* 1, 1 (2004).

ANSWERS TO POST-HEARING QUESTIONS

Responses by Bruce R. Scott, Paul Whiton Cherington Professor of Business Administration, Harvard Business School

Questions submitted by Chairman Brad Miller

Q1. In your written testimony, you call "one of the great risks of capitalism" the fact that "powerful people can use the system to appropriate common resources from their neighbors, all in the name of greater efficiency through privatization." Is it easier for the powerful to "use the system to appropriate common resources from their neighbors" under capitalism than under other economic systems, or more likely for any other reason that they will do so? As a corollary, is such behavior easier or more likely under certain forms of capitalism than under others?

A1. We think of our economy as one based on private property, and private enterprise in particular. While true, our economy relies on public resources as well, both natural resources and public goods such as an educational system, public health and the entire regulatory system that protects our resources. Often we fail to recognize that these public resources are exposed to capture and or abuse by economic actors, as for example when private actors pollute the water, the air, or the appearance of an area, a situation called creating negative externalities, meaning that the polluter can get away without being charged for the transgressions. Some degree of negative externalities is almost inevitable, but it is the job of the regulators to hold this type of behavior in check, for example through monitoring by the EPA or the Department of the Interior, etc.

However, a version of capitalism premised on extreme deregulation, or still worse self regulation, creates a culture not only of contempt for the protection of public resources it invites business interests to corrupt the regulators and the extreme to try to privatize government through taking it over piece meal. Whole services such as logistics support for the military in Iraq have been privatized, as have others in the U.S. If this much is obvious it may not be so obvious that much the same can be done for the market frameworks more broadly. Lobbying can transfer revenues from the IRS and thus the taxpayers to the firms through the creation of subsidies or less visible loopholes. Similar transfers can be effected from consumers or employees to business interests, all in the spirit of enjoying a free for all at public expense. Our news papers carry such stories day by day and week by week.

Rising inequalities of income are a sign that the market frameworks are being tilted in favor of the rich, as they have been in this country since 1981. The U.S. now has the most unequal incomes among industrial countries as a result of just such tilting of its market frameworks. One of the most egregious examples was the business lobbying that prevented the FASB and the SEC from requiring the expensing of stock options as a business expense. About 75 percent of CEO pay in large firms has been in the form of payments such as options that did not have to be reported or recorded as expenses. This created a totally phony market of extraordinary CEO pay that was "free" for the company so far as its profit and loss accounts were concerned.

Q2. Recalling that U.S. states were once able to "ask for something in return" for granting a corporate charter, in your written testimony you advocate establishing "a mandatory standard of stakeholder welfare," which you say "would put U.S. firms more nearly in step with some of the major European countries." What is a "mandatory standard of stakeholder welfare"? How does it work in countries where it is in existence, and what form might it take in the United States?

A2. The U.S. is in a small minority of countries where firms may view their primary mission of the firm as the maximization of shareholder value. Since in practice this translates into maximizing the likelihood of regular stock price increases this tends to induce corporate cultures of management by the numbers, where the importance of relationships with customers, employees and communities is devalued. It also produces a tendency to continuously take risks to boost share price, even to the point of "overvaluing the stock" to achieve numerical targets. Over-valuation in turn increases the temptation to fudge the accounts in subsequent periods to maintain performance, as was obvious in the Enron situation among others.

Q3. You testified that the growth of economic inequality that began in the United States during the decade of the 1980s has not been in evidence in at least some European countries. Can you comment on the implications of the degree of eco-

nomic equality or inequality for the health of a national economy, its prospects for growth, and the general health of the society?

A3. Most countries have a single authority that charters firms, and historically these authorities have demanded that the firm be managed for the long-term health of the firm, with due care for its employees, customers, suppliers and affected communities. With that commitment built into the charter a firm can be held to much higher standards of sensitivity for its actions, and by government as well as shareholders. Since most firms in the U.S. have been chartered by the individual states, there has long been a race to the bottom to compete for chartering fees and other revenues by having minimal requirements for a charter. As Theodore Roosevelt pointed out a century ago, the U.S. needs a chartering authority whose reach is as extensive as the market, and whose power exceeds that of even a very large firm. We are an exception in allowing out continental market to be exploited as an underregulated common resource of incredible value. A federal charter or license could change this, by mandating a broader sense of corporate purpose.

Appendix 2:

Additional Material for the Record

Memorandum May 21, 2008

TO: Subcommittee on Investigations and Oversight, Committee on Science and Technology, U.S. House of Representatives
Attention: Ken Jacobson

FROM: John F. Sargent
Specialist in Science and Technology Policy
Resources, Science, and Industry Division

SUBJECT: The Global Competitive Environment, Drivers of Change, and Potential Implications for Federal Policy

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This memorandum is in response to your request for information on the influences that are reshaping the global competitive environment and potential implications for U.S. policy. Congress has maintained continuing interest in the nation's competitiveness due to its implications for U.S. economic growth, job creation, standard of living, quality of life, and national security.

Technology and innovation have been central themes in discussions about competitiveness, along with key factors such as the U.S. workforce (e.g., education and training, with an emphasis on developing scientists and engineers), business climate (e.g. economic, trade, tax, tort, regulatory, and intellectual property policies), and infrastructure (e.g., roads, bridges, ports, airports, energy generation and transmission, telecommunications, national research facilities and equipment).

Many analysts have observed that a variety of powerful influences have converged during the past two decades to reshape the global business environment. Underpinned by advances in information and communications technology, market-based economic reforms, and free trade agreements, globalization and the integration of the world's national economies have accelerated. Historically, the interests of private enterprises, universities, individuals, and other institutions were strongly aligned with the nations in which they resided. Global drivers of change appear to have partially decoupled the interests of nations and some of the institutions that reside within.

This memorandum is focused on addressing selected influences driving changes in the global competitive environment; how these influences have shaped, and may continue to shape, the global competitive environment; and some of the potential implications for federal policy. I hope this information meets your needs. Should you require any additional material or if you have any questions, please call me at 7-9147.

Past and Current Competitiveness Challenges

The competitiveness concerns of the late-1970s and early-1980s were driven largely by the emergence of strong Japanese competitors in industries such as steel, automobiles, machine tools, and consumer electronics. These were industries in which the United States had been the global leader for decades and which had played a major role in building the nation's economic strength and prosperity. Many of the competitiveness concerns were driven by the close relationship between the government of Japan and its companies, leading some to refer to them collectively as "Japan, Inc." There was a sense that U.S. companies (and by extension, U.S. workers) were, in part, put at a competitive disadvantage by this relationship. As Japanese companies gained market share at the expense of U.S. companies, some American workers felt the pinch as plants closed and jobs were lost.

The competitive challenge of that period largely pitted the United States, its workers, companies, and universities—all in it together—against Japan (and to a lesser extent European competitors such as Germany) across a broad range of technologies and industries. From a federal policy perspective, U.S. companies were seen as the vehicle through which the nation competed, and thus the federal response was focused on helping companies compete. This response was multi-faceted, and included expansion of federal research and development (R&D); programs to support development of generic and enabling technologies; tighter linkages between federally-funded R&D at universities and government laboratories and the needs of industry; initiatives to foster greater technology diffusion; efforts to increase the number of scientists and engineers; and trade negotiations to open Japanese markets. Nevertheless, there were a variety of dissenting opinions including those advocating an explicit industrial policy to advance technology development and support struggling industries, others who sought to close U.S. markets to some foreign products or impose levies, and some who believed that U.S. interests would be best served by relying on market forces rather than federal policies or investments.

Some analysts believe that the current competitiveness challenge is different in at least two fundamental ways. First, they argue that there has been some decoupling of the tight alignment of interests between the United States and its citizens on the one hand, and some U.S.-based companies, investors, and universities on the other. This decoupling appears to be happening not just in the United States, but to different extents in other nations as well. Second, these analysts assert while the earlier competitive threat was essentially posed by a single nation (Japan) and its institutions with strength across a broad array of technologies and industries, the new competitive environment is populated by large and small companies around the world, including conglomerates that span multiple industries and have competencies in a broad range of technologies, as well as smaller companies with strengths in high value-added niches. According to these observers, the United States is well positioned to prosper in this new competitive global environment; however, it may require a review and realignment of federal policies, programs, and investments focused on improving national economic strength and prosperity. With global companies making decisions on a daily basis on where to locate work and production, federal government policies may be more effective in this environment if they seek both to *grow* and support domestic companies and to attract high value-added work (manufacturing and services) of all companies, domestic and foreign.

Drivers of Change

Many business leaders and analysts believe that the global competitive environment is being reshaped by powerful new drivers, foremost among them the digital revolution and the addition of new nations to the competitive arena. Several of these drivers are complementary to, and reinforcing of, other drivers.

The digital revolution opens new labor pools and enables new business processes and models. The development and global deployment of affordable, reliable, high-speed digital computing and communications technologies—the digital revolution—has enabled emerging and less-developed economies to connect to the developed world and its businesses. New business models and processes have been developed that have enabled firms to digitize and decompose (parse, slice, break down) large and complex work processes into smaller elements. These elements can be assigned, digitally sent, and performed wherever they can be done most effectively, tapping global labor pools. Upon completion, the work elements can be digitally returned and re-integrated into a complete work product.

The digitization of knowledge work (e.g., software and applications development, product design, engineering, architectural design, accounting), the codification of work into rule-based procedures, and the speed at which skills training is developed and made widely accessible have allowed populations in less-developed and developing countries to acquire skills and compete for knowledge work. These factors have allowed some countries to bypass the traditional economic development process—formerly a decades-long advance from low value-added industries (primarily commodity manufacturing) to higher value-added industries (advanced manufacturing and services)—and move at least part of their economies directly to higher value-added knowledge work. Also, while the relocation of manufacturing activities (e.g., building factories, developing supply chains) is expensive and time consuming, the relocation of knowledge work can take place faster and with fewer resources (e.g., an office, computers, telephones and Internet access). As a result, a growing number of countries can support high value-added business activity, creating a far more dynamic market in the world's knowledge and service-based industries. However, the digital revolution has also raised concerns about potential loss of privacy, identity theft, protection of intellectual property, and the effects of the commoditization of skills on U.S. workers. These concerns may act as impediments to globalization.

Economic reforms bring more nations, competitors, workers, and consumers into the global arena. Many nations around the world have embraced trade, undertaken free market economic reforms, and established the modern business infrastructure required to participate in global commerce. For example, some emerging economies have amended their national investment laws and established reliable financial institutions allowing capital to flow quickly to opportunities in their countries. As a result, the number of nations and workers that are able to participate in the global economy has expanded rapidly. Membership in trade organizations has increased from 23 countries in 1948 (under the General Agreement on Trade and Tariffs) to 151 today (under the World Trade Organization), significantly expanding the world's competitive arena. Notably, the governments of China, India, Russia, and Eastern Europe have embraced, to varying degrees, capitalism, free market economic principles, and entrepreneurship, and have taken steps to align national policies accordingly. In recent years, formidable new corporate competitors have emerged in these and other nations.

The addition of these countries to the global trading system effectively doubled the world's labor force.[1] This represents an unprecedented addition of productive capacity to the global free market economy, at the same time that knowledge and service work could be internationalized. While many of the workers in these nations are low-skilled, these nations also have large and rapidly growing pools of skilled and educated people who earn wages that, while high for their country, are far below the wages earned by American workers. Some have expressed concerns that the availability of these low-cost workers may adversely affect American workers through job losses and downward wage pressures. Corporations seeking to reduce labor costs may move knowledge work and/or production activities that are currently conducted by U.S. workers to other nations. While this may serve the interests of the corporation, some believe it may run counter to U.S. national interests. Others believe that offshoring (i.e., the movement of work to offshore locations) may serve the national interest by increasing market efficiency, improving the competitiveness of American-based companies, and reducing the cost of goods and services to U.S. consumers. In addition, some argue that such activities can improve standards of living abroad, increasing consumer demand and creating new commercial opportunities for U.S. companies and jobs for Americans.

American workers who lose their jobs as a result of globalization may require additional education and training to qualify for and secure new jobs. Some federal programs seek to provide assistance to these workers. For example, the federal Trade Adjustment Assistance (TAA) program is intended to help workers adversely affected by trade.[2] However, critics assert TAA has many shortcomings, including that eligibility is limited to workers who make "articles," effectively excluding service workers such as those engaged in information technology services (e.g., computer programmers, software engineers, database administrators) that have been among those most affected by offshoring. Some opponents of TAA assert that job displacement by foreign trade is no different than displacement due to other factors, such as domestic competition or automation, and therefore should not be singled out for special assistance. Others argue the program is ineffective; not well managed; and not focused on metrics of success (e.g., displaced workers securing new jobs).[3]

New forms of trade. Historically, international trade involved the transfer of goods across international borders. In recent years, alternative methods of delivering products to foreign markets— including sales through foreign affiliates and intrafirm transfers—have grown rapidly and are reshaping notions of international trade. In 2003, U.S. multinational corporations sold more than three times as much through foreign affiliates ($3.4 trillion) as through exports ($1.0 trillion).[4] In addition, growth in globally integrated supply chains has resulted in greater intrafirm transfers. Such related-party trade accounts for half of U.S. imports and one-third of exports.[5] Economists have long noted that pricing of goods in

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[1] Freeman, Richard, professor, Harvard University. *The Great Doubling: The Challenge of the New Global Labor Market*. August 2006.

[2] For additional information on this issue, see CRS report RL34383, *Trade Adjustment Assistance for Workers: Current Issues and Legislation*, by John J. Topoleski.

[3] Froning, Denise H. *Trade Adjustment Assistance: A Flawed Program*, Heritage Lecture #714, The Heritage Foundation, July 31, 2001.

[4] *Competitiveness Index: Where America Stands*, Council on Competitiveness, 2007.

[5] Eden, Lorraine, associate professor, Texas A&M University. *Transfer Pricing, Intrafirm Trade*. (continued..)

intrafirm transfers may be affected by corporate efforts to reduce taxes and tariffs, and thus distort trade statistics and assessments of national competitiveness. This, in turn, may make it more difficult to determine how to align policies, programs, and investments to foster U.S. competitiveness and economic prosperity.

In addition to the large multi-national trade agreements, nations have also established and continue to negotiate regional and bilateral trade agreements with unique, and sometimes preferential, treatment of signatories. However, supply chains in the new global business environment often span national borders, and can involve countries that are part of a bilateral or regional agreement and those that are not. As intermediate and end-products that incorporate components from multiple countries cross national borders, questions can arise as to which trade agreement or agreements might apply in any given instance. In a larger context, increased globalization may challenge the viability of the current global trade framework.

Countries may also be challenged in finding pathways to serve both national interest and corporate interests. For example, U.S. export control policies seek to protect national and homeland security by restricting some foreign access to products, software, and technologies (including technical knowledge) that have military or dual-use purposes. In today's globalized business environment, corporations are tapping capabilities and locating work and manufacturing capabilities to maximize corporate interests (e.g., to reduce costs, reach markets, improve innovation, tap best-in-class suppliers), sometimes in nations that the United States government may view as potential adversaries. To fully utilize these global capabilities, companies often move products, software, and technologies across borders. Such transfers—even when conducted solely for commercial business reasons—may be deemed contrary to U.S. national interests under export controls laws and regulations. Conflicts between national and corporate interests have emerged in fields such as semiconductors, encryption, and nanotechnology.

Rise of foreign scientific and technological capabilities. There is general agreement that the United States remains the global leader in science and technology.[5,7] The United States continues to lead all other nations in funding of R&D. In 2004, the United States invested more than 2½ times as much as the second largest conductor of R&D (Japan), and more than the rest of the G-7 countries combined.[8] Many nations, however, have recognized the important role technological leadership has played in economic development and have increased their public investments in R&D. For example, according to the Organization for Economic Cooperation and Development, China's rapid expansion of R&D was expected to propel it ahead of Japan in 2006, to become the world's second largest investor in R&D.[9] In total, foreign R&D investments have grown faster than those of the

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[7] (...continued)
and the BLS International Price Program, July 2000.

[8] *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*, The National Academies, 2007.

[7] *Competitiveness Index: Where America Stands*, Council on Competitiveness, 2007.

[8] *Science and Engineering Indicators 2008*, National Science Foundation, 2008. [www.nsf.gov/statistics/seind08/c4/fig04-15.xls]

[9] *Science, Technology, and Industry Outlook 2006*, Organization for Economic Cooperation and (continued...)

United States, reducing the U.S. share of global R&D from 69% in1960 to approximately 33% in 2002, even as U.S. R&D quadrupled in real terms.

Nevertheless, while rapidly developing nations may invest substantial capital in R&D, the efficacy of a nation's R&D investment in producing commercially viable technology and economic returns depends on a variety of other factors, including: the quality of the researchers, scientific and technological infrastructure, alignment of R&D with market needs, and the strength of linkages between academia and industry. In addition, developing nations may lack key elements needed to fully capitalize on viable technology, such as: a mature industry, service, and private capital infrastructure; experienced managers, entrepreneurs, and other business professionals; and/or a market-oriented business climate.

Many nations have also focused on increasing the number of scientists and engineers through targeted education efforts. As a result, some assert there are more scientists alive today than ever in human history.[10] Record levels of global R&D funding supporting work conducted by (possibly) record numbers of scientists and engineers may suggest that the scope and pace of innovation will continue to increase. One indicator of increased innovation is the number of patent applications to the U.S. Patent and Trademark Office. From 1956 to 2006, the number of U.S. patent applications grew by 487% while U.S. R&D grew 669% in constant dollars. During this period, the number of patents granted to foreign residents increased by 1313%.[11] In addition, for many industries, product development cycles have shortened and time-to-market has emerged as an important factor in competitiveness. An accelerated pace of innovation may lead to faster obsolescence as new products replace current ones more quickly. Increased knowledge diffusion may also lead to faster commoditization of products and knowledge. These factors could necessitate business models that extract maximum value from a new innovation in a shorter time. In turn, this may drive increased globalization as companies attempt to maximize customer reach. Alternatively, increased globalization could lead to economic and social disruptions that could lead some nations to respond with tariffs, subsidies, or other trade barriers.

Some believe that aligning federal policies with the demands the global economy puts on business may help to attract and retain high value-added activities. Others oppose a strong federal role in what they believe should be, fundamentally, a free market activity.

Globally Integrated Enterprises. Much media and policy attention has focused on "offshoring"—the movement of a company's business functions (e.g., information technology, accounting, customer service) or discrete work activities (e.g., developing a software application) to locations outside the United States, generally to reduce cost by tapping lower-wage skilled and semi-skilled labor—and its effects on U.S. jobs and economic growth. More recently, though, a new business model has emerged that takes a more holistic approach to accessing and integrating knowledge, expertise, capabilities, and

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[9] (...continued)
Development , 2006.

[10] Some assert that the number of scientists and engineers alive today is greater than the total of all scientists and engineers that previously existed throughout human history. See *Transformational Leadership*, lecture by former House Speaker Newt Gingrich. National Academy of Public Administration, November 21, 2003.

[11] U.S. Patent and Trademark Office website. [www.uspto.gov/go/taf/h_counts.htm]

other assets worldwide: the globally integrated enterprise. This model is described in the U.S. Council on Competitiveness' 2007 *Competitiveness Index* report:

> Enabled by digital commerce and the slicing of product and service processes, U.S. multinational corporations are adopting global sourcing and delivery strategies, creating product and service value chains that span the globe. With standard business processes and methodologies supported by a global infrastructure, U.S. multinationals serve markets, deploy capabilities, and employ resources in an ever-widening geographic arc. From R&D and production, to computer programming and customer services, global enterprises can locate business processes nearly anywhere in the world…
>
> Activities along the global value chain have become increasingly disintegrated and allocated to those companies and locations best suited for each individual activity. Multinational corporations—and now, truly global enterprises—have played a critical role in this process, by investing abroad, by engaging new foreign suppliers, and by specializing in activities in which they have specific competitive advantages. They have created vast networks in which many small and medium-sized companies providing specialized inputs and services are directly integrated with global value chains.[12]

In this model, national borders are largely invisible to companies as they seek to conduct work across their entire value chain where it can be done most efficiently and effectively. A wide range of factors that might affect corporate value-creation—e.g., cost, speed, flexibility, quality, innovation, service—are prioritized and assessed. Public policies (e.g., tax, regulation, tort, labor) and public assets (e.g., national laboratories and equipment) are incorporated in this larger context. Companies operating globally must also consider and address social, cultural, and demographic difference. This approach is summed up by IBM CEO Samuel J. Palmisano:

> Simply put, the emerging globally integrated enterprise is a company that fashions its strategy, its management, and its operations in pursuit of a new goal: the integration of production and value delivery worldwide. State borders define less and less the boundaries of corporate thinking or practice.[13]

Some assert that the interests of U.S. multinational corporations (MNCs) and U.S. small and medium-sized enterprises (SMEs) have diverged as well. For example, there has been wide media reporting of a rift within a large manufacturing trade association between some MNC and SME members with respect to public policies the organization should advocate for. Once reliant primarily on U.S. SMEs as critical elements in their supply chains, globalization has created new options for MNCs, and some have replaced U.S. SMEs with suppliers in other countries. As a result, some SMEs have faced deep revenue losses, temporarily or permanently closing down operations. Some SMEs have benefitted from globalization by becoming part of the supply chains of non-U.S. companies. Others have benefitted by using new services, technologies, and transportation systems to serve customers around the world; previously such markets could only be served effectively by MNCs with extensive global sales, marketing, distribution and transportation infrastructure.

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[12] *Competitiveness Index: Where America Stands*, Council on Competitiveness, 2007.

[13] Palmisano, Samuel J. "The Globally Integrated Enterprise," Foreign Affairs, May/June 2006.

Potential Implications for Policy: Issues for Consideration

Competitiveness has been an abiding interest in Congress for decades, and remains so today. In recent years, Congress has held hearings, debated the merits of different approaches, and enacted legislation (e.g., the America COMPETES Act, P.L. 110-69)[14] to foster U.S. competitiveness and prosperity. If Congress chooses to further explore and address competitiveness issues, it may be useful to consider the policy implications of trends that have reshaped—and continue to shape—the global competitive environment. This section provides a discussion of selected areas for consideration. Some challenges identified in this section may be addressed in the near term through non-formal processes; others may require more extensive discussion, analysis, and changes requiring legislation.

Federally-funded Research and Development. Congress funds R&D for a variety of purposes including: specific concerns such as national defense, health, safety, the environment, and energy security; advancing knowledge generally; developing the scientific and engineering workforce; and strengthening U.S. innovation and competitiveness in the global economy. Most of the research funded by the federal government is in support of specific activities of the federal government as reflected in the unique missions of the funding agencies.

In light of the changed competitive environment and concerns about U.S. technological leadership and its implications for competitiveness, Congress, through its authorization and appropriations processes, may elect to consider the way R&D funding decisions are made. In doing so, Congress may choose to explore issues involving adequacy of the investment and the balance of the portfolio with respect to a variety of factors, including for example, the relative apportionment of R&D funding:

- among basic research, applied research, and development activities;
- between proprietary and open research;
- between investigator-driven basic research and goal-driven basic research;
- among disciplines;
- between single disciplinary research and multi-disciplinary research;
- between defense and non-defense R&D; and
- among conductors of R&D (e.g., government, academia, and industry).

Development of a comprehensive, balanced national R&D budget is impeded in part by the process used by the Executive Branch for formulating an annual budget and the process used by Congress to authorize and appropriate funds. In the case of the Executive Branch, R&D funding is included within the overall budget development process of each agency in conjunction with OMB. The President's annual proposed R&D budget is essentially a summation of the R&D requests of each agency. At the same time, approaches such as President Bush's American Competitiveness Initiative (ACI) are intended to broadly influence R&D investments by targeting specific agencies for funding increases. In the case of the ACI, the Department of Energy's Office of Science, the National Institute of Standards and Technology, and the National Science Foundation were targeted in order to increase spending on physical sciences and engineering research and development.

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[14] For additional information on the America COMPETES Act, see CRS report RL34328, *America COMPETES Act: Programs, Funding, and Selected Issues*, by Deborah D. Stine.

The Congressional authorization and appropriations process also may not lend itself to the development of a comprehensive and balanced national R&D budget. For example, the House and Senate Committees on Appropriations each have 12 subcommittees, each with jurisdiction over an annual appropriations measure that provides funding for departments and agencies under that subcommittee's jurisdiction. To meet its appropriations mark set by the budget resolution, a subcommittee may alter funding levels between programs within an agency, among programs within a department, or among different agencies under its jurisdiction. This may lead to unintended results if a coordinated and balanced approach to federal R&D spending is determined to be advantageous to U.S. policy.

Thus Congress may want to consider whether the efficiency and effectiveness of the federal R&D budget in fostering national competitiveness might be improved by changes in the executive branch and legislative branch processes that contribute to the development and funding of a comprehensive and integrated R&D portfolio. Such efforts might be most effective in the near term through closer collaboration within and between branches in developing and funding the federal R&D portfolio. In the longer term, Congress might choose to consider more formal, structural changes to the processes. Also, while fostering U.S. competitiveness is one framework Congress might choose to use in structuring the R&D portfolio, alternatively frameworks could seek to maximize federal R&D's contribution to national security, energy security, or environmental quality.

Federal Support for U.S. Scientific and Engineering Workforce Development. Congress supports the development of the scientific and engineering workforce through a wide variety of mechanisms.[15] Many in government, industry, and academia have called for federal efforts to increase the number of U.S. citizens earning degrees in science, technology, engineering, and mathematics (STEM) as a competitive response to the perceived increased technical capabilities and industrial competitiveness of other nations. Others express concern that past and projected demand for scientists and engineers does not support the need to increase the number of U.S. students earning STEM degrees, broadly, though acknowledge a case may be made for increases in specific disciplines.[16] Congress expressed its intent in the America COMPETES Act which authorizes a variety of initiatives intended to increase the number of students choosing to pursue STEM education, including new programs to increase the number of STEM teachers and to improve the knowledge and skills of current STEM teachers. While there is disagreement about the need for a broad increase in the number of STEM graduates, there is a broad consensus on the need for students pursuing such degrees to acquire additional non-technical skills.

U.S. graduates with STEM degrees will join a rapidly growing global pool of scientists and engineers. While it remains to be seen if graduates of foreign educational institutions have the same degree of expertise provided by U.S. colleges and universities, China and

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[15] These mechanisms include: scholarships, loans, grants, work-study and co-op programs, fellowships, traineeships, internships, funding of university-based research, summer institutes at national laboratories, and support for teacher professional development and curricula development.

[16] See testimony of Michael S. Teitelbaum, Vice President of the Alfred P. Sloan Foundation, before the Subcommittee on Technology and Innovation, House Committee on Science and Technology, hearing on "The Globalization of R&D and Innovation, Pt. IV: Implications for the Science and Engineering Workforce," 110th Cong., 1st Sess., November 6, 2007.

India (with populations 4.4 and 3.7 times larger than the United States) have focused on increasing the number of students graduating with STEM degrees. Currently, scientists and engineers in these and other developing countries earn a fraction of the wages earned by scientists and engineers working in the United States. Facing less expensive competition, U.S. scientists and engineers may need to offer greater value to employers or, alternatively, face downward pressure on wages or lost jobs. Thus, Congress may elect to consider whether and how federal programs and initiatives might be modified to increase the capabilities and productivity of U.S. scientists and engineers. Such efforts might include an assessment of:

- the types of work performed by graduates with STEM degrees,
- the knowledge and skills needed in each line of work,
- the knowledge and skills imparted through current STEM degree programs,
- the ability and inclination of educational institutions to receive and adapt to market signals about changing knowledge and skill requirements,
- the ability of the U.S. educational and training infrastructure to support the acquisition of new knowledge and skills by scientists and engineers currently in the workforce, and
- the way federal education and training programs can assist unemployed U.S. scientists' and engineers' transition to new opportunities.

Based on these assessments, Congress may wish to increase funding for or modify provisions of existing programs, leave them unchanged, shift resources to more effective programs, and/or eliminate programs. While some believe federal policies can help shape the knowledge and skills of the U.S. workforce to be more responsive to future global opportunities, others believe that the most effective means to accomplish this is to allow market forces to shape individual choices.

Today, individuals with degrees in science and engineering work in a variety of capacities. For example, scientists and engineers work as employees, independent consultants, and entrepreneurs; conduct scientific and engineering research, develop products, and manage technology development; and are employed in non-S&E fields such as law, education, finance, and public policy. They work in laboratories, in corporate boardrooms, and on Wall Street. They work independently and in collaboration with other scientists and engineers (increasingly with those in disparate disciplines), business professionals, customers, and others, both in the United States and in nations with different languages, cultures, and business practices. The variety of knowledge and skills required to succeed in these environments suggests that educational approaches focused only on imparting technical knowledge and skills may be insufficient preparation for the opportunities and challenges ahead.

Some assert that universities, in general, lack mechanisms for receiving labor market signals, are slow to adapt to labor market changes, and resist efforts to become more responsive to labor market needs. Among the options Congress might want to consider to address these perceived shortcomings are ways to improve the responsiveness of federal STEM education programs to labor market signals; impart complementary business, management, communications, language, cultural, and entrepreneurial skills; and prepare STEM graduates for self-directed life-long learning needed to keep pace with changing knowledge and skill demands. Areas for review and analysis may include:

- establishment of tighter and more responsive feedback loops between educators/educational institutions and employers;

- cross-disciplinary education to exploit what many expect to be significant opportunities at the intersection of traditional disciplines (e.g. bio-informatics, bioengineering, microelectricalmechanical systems, chemogenomics);
- exposure to fields not generally a part of S&E education (e.g. cultural anthropology, data visualization, business, innovation, law, public policy, language, foreign cultures);
- methods of teaching (e.g., lectures, seminars, laboratory work, team projects, hands-on exercises, work-study, deep dives); and
- innovation-related knowledge and skills that facilitate the translation of knowledge into products, processes, and services (e.g., technology management, design, finance, manufacturing).

Some counter that during the period of rapid growth in the IT workforce in the late-1990s, the U.S. academic and training infrastructure responded rapidly and broadly to meet labor market demands; the universities' response, however, was hampered in part by the length of time required for creating and getting approval for new curricula. Others argue that universities are institutions of higher learning and should not serve the function of job training. In addition, some believe that this issue is best addressed between consumers (i.e., employers, students) and producers (i.e., universities), with little or no government involvement.

Retaining U.S.-educated foreign science and engineering graduates. In the era following World War II, many of the most gifted and talented students from around the world were attracted to the science and engineering programs of U.S. colleges and universities. Over time, the share of STEM degrees conferred by U.S. institutions to foreign students continued to grow. In 2005, more that two-thirds of engineering doctorates awarded by U.S. universities were awarded to non-U.S. citizens (62.2% to non-U.S. students with temporary visas; 4.7% to non-U.S. citizens with permanent visas).[17] For many years, a large number of those who graduated from these programs stayed in the United States and contributed to U.S. global scientific, engineering, and economic leadership. Today, many foreign students educated in the United States have economic opportunities in their home countries that did not exist for previous generations. Some nations are making strong appeals and offering significant incentives for their students to return home to conduct research and create enterprises. Thus, federal support for universities, in general, and scientific and engineering research activities, in particular, may contribute to the development of leading scientists and engineers who might return to their home countries to exploit the knowledge, capabilities, and networks developed in the United States. This may result both in the loss of value that might have been created in the United States as well as the development of firms, products, and/or services that compete against U.S. firms and workers.

Advocates for retaining these foreign graduates argue for the creation of new mechanisms or adjustments to existing ones to encourage some or all of these students to remain in the United States, including policies related to the number, length, eligibility, limitations, and conditions of temporary and permanent visas, and pathways to citizenship. Some analysts have suggested that the United States take a more targeted approach, focusing on identifying and retaining those most likely to contribute to U.S. competitiveness and other national needs. However, some opponents express concern that immigration preferences for

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[17] CRS analysis of published data; analysis excludes data for doctorates awarded to students for whom citizenship is unknown. *Science and Engineering Doctorate Awards: 2005*, Table 3, National Science Foundation, 2006.

science and engineering graduates may encourage foreign students without exceptional science and engineering talents to pursue S&E degrees for the primary purpose of gaining U.S. citizenship.

Creating an Attractive Business Environment. A variety of government policies, programs, and investments affect the environment for innovation, investment, and entrepreneurship, as well as the attractiveness of the United States to foreign firms to establish operations and/or conduct work. These include regulatory, tax, patent, tort, trade, labor, and immigration policies; and national infrastructure policies and investments (e.g., roads; ports; airports; bridges; telecommunications; and technical laboratories and equipment). An analysis of the nation's strengths and weaknesses in these areas with respect to growing, retaining, and attracting high value-added activities in the United States—especially in comparison to the policies, programs, and investments of other nations—might aid Congress in the development or consideration of legislation. In addition, an analysis of the criteria used by U.S. and foreign companies in site and work location decisions might complement this work. The breadth of policy areas and myriad of options preclude an exhaustive discussion in this paper. One or more of these topics could be addressed in greater detail by the Congressional Research Service upon request.

Concluding Observations

The convergence of influences is reshaping the global competitive environment. The number of countries, companies, and workers engaged in this competition continues to grow. New technologies, new business models, and broad adoption of market-based policies and free trade may have implications for federal R&D, infrastructure, regulation, taxation, and patent, tort, trade, labor, immigration and other policies. It is likely that the global competitive environment will continue to evolve with additional changes in technology, business models, national policies, and other factors. Congress may choose to consider mechanisms for monitoring, tracking, and assessing these changes; the policies, plans, priorities, strategies, and investments of other nations; the potential implications for federal policy; and the development of options Congress may consider in fostering U.S. economic prosperity and in addressing other national priorities.

AMERICAN DECLINE OR RENEWAL? PART 2—THE PAST AND FUTURE OF SKILLED WORK

TUESDAY, JUNE 24, 2008

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT,
COMMITTEE ON SCIENCE AND TECHNOLOGY,
Washington, DC.

The Subcommittee met, pursuant to call, at 1:07 p.m., in Room 2318 of the Rayburn House Office Building, Hon. Brad Miller [Chairman of the Subcommittee] presiding.

BART GORDON, TENNESSEE
CHAIRMAN

RALPH M. HALL, TEXAS
RANKING MEMBER

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Subcommittee on Investigations and Oversight

Hearing on

American Decline or Renewal?
Part 2—The Past and Future of Skilled Work

Tuesday, June 24, 2008
1:00 p.m. – 4:00 p.m.
2318 Rayburn House Office Building

Witness List

Dr. John Russo
Co-Director, the Center for Working-Class Studies and Coordinator, the Labor Studies Program, the Warren G. Williamson School of Business Administration, Youngstown State University, Ohio

Mr. Frank H. Morgan
Attorney, White & Case LLP, Washington, D.C.

Mr. Howard F. Rosen
Executive Director, the Trade Adjustment Assistance Coalition and a visiting fellow, the Peterson Institute for International Economics, Washington, D.C.

Ms. Jeanie Moore
Vice President, Continuing Education Programs, Rowan-Cabarrus Community College, Salisbury, North Carolina.

Dr. Thomas I. Palley
Founder, Economics for Democratic & Open Societies Project, Washington, D.C.

Ms. Diana Furchtgott-Roth
Director, Center for Employment Policy and senior fellow, the Hudson Institute, Washington, D.C.

HEARING CHARTER

SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT
COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

American Decline or Renewal? Part 2—The Past and Future of Skilled Work

TUESDAY, JUNE 24, 2008
1:00 P.M.–4:00 P.M.
2318 RAYBURN HOUSE OFFICE BUILDING

Purpose

This hearing will focus on how the United States can maintain and expand high-skilled, high-paying jobs here at home. To examine this question, which is central to the Nation's competitiveness in a globalized economy, the hearing will survey the efficacy of past and current efforts to aid dislocated workers and communities. Manufacturing, the traditional engine of value-added production in our economy, has been deeply affected by globalization, and service industries—even those relying on highly trained personnel—are coming under increasing pressure from foreign competitors.

The hearing will also assess the structure of international trade in order to predict how well domestic efforts at retraining and reinvestment can be expected to succeed in the future. For the health of the national economy, and the scientific and technological enterprises dependent on it, we must learn what our workers and communities need. The goal must be, as the former Chair of the Council of Economic Advisers, Laura D'Andrea Tyson, put it, "to produce goods and services that meet the test of international competition while our citizens enjoy a standard of living that is both rising and sustainable."

The Committee on Science and Technology has jurisdiction that directly relates to the competitiveness of the United States through our authorization of programs that directly contribute to innovation. The Committee has a specific interest in the health of the Nation's manufacturing industries through its connection to the National Institute of Standards and Technology, whose budget it authorizes. In addition, the Committee annually authorizes the expenditure of billions of dollars to support scientific research and the training of the next generation of scientists and engineers, and has taken steps to support retraining of workers for high tech employment opportunities.

This hearing has been designed to help the Committee in identifying measures that might increase the likelihood of high-value-added activities remaining, increasing, and succeeding within U.S. borders. By so doing, it will contribute to the future health of America's economy and the future prosperity of its citizens.

The hearing will take testimony on the impact on workers and communities when jobs move abroad; problems with the current program of Trade Adjustment Assistance in supporting workers whose jobs have been sent off-shore; successes of using community colleges, working with local businesses, to retrain displaced workers; the need for rethinking the supports and our approach to global trade if high-paying employment and a good standard of living are key economic policy goals for the country.

Witnesses:

Dr. John Russo is the coordinator of the Labor Studies Program at the Warren G. Williamson School of Business Administration of Youngstown State University in Ohio, and the founder and Co-Director of Youngstown State's Center for Working-Class Studies. He is co-author with Sherry Linkon of *Steeltown, USA: Work and Memory in Youngstown.*

Mr. Frank H. Morgan is an attorney at the Washington, DC, firm of White & Case LLP. He has pled before the International Court of Trade in New York City on behalf of workers whose petitions for Trade Adjustment Assistance have been denied by the U.S. Department of Labor.

Mr. Howard F. Rosen is the founder and Executive Director of the Trade Adjustment Assistance Coalition and a visiting fellow at the Peterson Institute for International Economics in Washington, DC. He is a leading expert on and advocate for programs designed to aid dislocated workers.

Ms. Jeanie Moore is Vice President for Continuing Education Programs at Rowan-Cabarrus Community College in Salisbury, NC. Her work on the effort to revive Kannapolis, NC, has been recognized by the U.S. Department of Labor, which in 2005 presented her with its Workforce Innovations Award for "Serving Special Populations in the Workplace."

Dr. Thomas I. Palley is the founder of the Economics for Democratic & Open Societies Project in Washington, DC. He earlier served as the chief economist of the U.S.-China Economic and Security Review Commission and as Director of the Open Society Institute's Globalization Reform Project.

Ms. Diana Furchtgott-Roth is a senior fellow at the Hudson Institute in Washington, DC. She earlier served at chief economist of the U.S. Department of Labor and as Chief of Staff of the President's Council of Economic Advisers. She writes a weekly column for the *New York Sun.*

Chairman MILLER. Good afternoon. This hearing will now come to order.

A casual examination of the usual measures of economic confidence among working families, the unemployment and inflation rates shows that everything is just fine. The current unemployment rate of 5.5 percent and the inflation rate of 4.2 percent are a far cry from the June, 1980, 7.6 percent unemployment and 14.4 percent inflation. But a closer look presents a very different picture for working Americans. Consumer confidence last month came in at its lowest levels since June of 1980. Only 13 percent of Americans rate the national economy positively, and 74 percent say it is getting worse according to a national poll released just a week ago.

Over the last generation economic conditions have fundamentally changed for American families, and simple comparisons of unemployment and inflation rates fail to capture those changes. Today American households carry debt that is equal to 132 percent of their disposable annual income, nearly twice the average debt load of 68 percent in 1980. For the past four years Americans have spent the equivalent of every penny they have earned, including what they have earned for retirement. In 1980, they were saving at a rate of 10 percent; the employment rate may be lower now, but the consequences of joblessness are likely to be dire for most Americans.

Still, an illusion of well-being persists in the minds of those who cling to the usual or traditional ways of looking at things. This mirage really obscures the profound changes in the American economy and keeps us from taking a hard look at the realities that so many of our families and communities face.

Now, here is another statistic that would provide comfort from a traditional economic viewpoint. American manufacturing productivity rose 3.6 percent in the first quarter of 2008. If that is true, why are Americans so worried? Here is why. Manufacturing output actually dropped during the same period. American workers' hours dropped even more. Productivity is manufacturing output divided by the number of hours worked. That apparent positive for the economy is, therefore, only statistical. In reality both output and workers' hours are down. When output and employment are rising, a productivity gain shows a robust economy, but in today's economy it masks the fact that we are producing less of what we need and taking home less for doing it.

It is obvious that we must go beyond the traditional analysis if we are to form an accurate picture of what is happening to Americans. We need to ask what changes in the last 30 years have skewed the results of familiar economic formulas. We need to ask what is behind those changes. Finally, we need to understand what we do know, whether it is scientific, technological, or educational, can be applied effectively to assure that our citizens and our communities can look forward to a secure and prosperous future in this globalized economy.

This hearing presents a second step along that path. On May 22 this subcommittee heard suggestions offered from a variety of perspectives on how to structure incentives so that American firms will maintain and expand at home in America. Today we will hear about what has happened when we failed at this in the past and

about the effectiveness of our efforts to aid the recovery of those individuals and communities who have directly paid the price.

We are fortunate to have with us witnesses who speak from a wide variety of experiences. Dr. John Russo is an academic who has lived through and studied one of the leading episodes of de-industrialization in America, that affecting Youngstown, Ohio.

Frank Morgan is an attorney who has represented displaced workers whose applications for Trade Adjustment Assistance, or TAA, have been denied by the Labor Department.

Howard Rosen is one of the leading advocates for the TAA, who will report on the program's shortcomings and put forward a national strategy for dealing with economic dislocation.

Jeanie Moore, a community college official, has played a leading role in one of the most striking community turnarounds in the country, that of Kannapolis, North Carolina.

Thomas Palley is not with us yet, but we assume he will be here in a short while. He is an economist who has long studied globalization and will assess our options for shaping its influence and addressing its effect.

And, finally, Ms. Diana Furchtgott-Roth, a senior fellow at the Hudson Institute in Washington. She earlier served as chief economist to the U.S. Department of Labor and as Chief of Staff of the President's Council of Economic Advisors.

This is obviously a complex topic. At our last hearing we heard completely contradictory viewpoints. Coming to grips with what it will involve is a challenging proposition, but long-held assumptions have to be examined and replaced sometimes with original thinking and novel ideas. But the difficulty of the task is no excuse for shrinking from it.

And I now recognize the distinguished Ranking Member from Wisconsin, Mr. Sensenbrenner.

[The prepared statement of Chairman Miller follows:]

PREPARED STATEMENT OF CHAIRMAN BRAD MILLER

A casual examination of the time-honored measures of economic confidence among working families, the unemployment and inflation rates, shows that everything is just fine. The current unemployment rate of 5.5 percent and inflation rate 4.2 percent, are a very far cry from June 1980's 7.6 percent unemployment and 14.4 percent inflation. But a closer look presents a very different picture for working Americans. Consumer confidence last month came in at its lowest level since June 1980. Only 13 percent of Americans rate the national economy positively, and 74 percent say it's getting worse, according to a national poll released just one week ago.

Over the last generation, economic conditions have fundamentally changed for American families and simple comparisons of unemployment and inflation rates fail to capture these changes. Today, U.S. households carry debt that is equal to 132 percent of their disposable annual income, nearly twice the average debt load of 68 percent in 1980. For the past four years, Americans have spent the equivalent of every penny they've earned—including what they've earned for retirement. In 1980, they were saving at a rate of 10 percent. The unemployment rate may be lower now, but the consequences of joblessness are more likely to be dire.

Still, an illusion of well-being persists in the minds of those who cling to the traditional ways of looking at things. This mirage obscures the profound changes in the American economy and keeps us from taking a hard look at the realities that so many of our families and communities face.

Here's another statistic that would provide comfort to traditional thinkers: U. S. manufacturing productivity rose 3.6 percent in the first quarter of 2008. If this is true, why are Americans so worried? Here's why: Manufacturing output actually dropped during this same period and, American workers' hours dropped even more. Productivity is manufacturing output divided by the number of hours worked. This

apparent positive for the economy is only statistical; in reality both output and workers hours are down. When output and employment were rising, a productivity gain signified a robust economy. In today's climate, it masks the fact that we are producing less of what we need, and taking home less for doing it.

It is obvious that we must go beyond conventional analysis if we are to form an accurate picture of what is happening to our people and our nation today. We need to ask what changes in the past 30 years have skewed the results of familiar economic formulas. We need to ask what is behind those changes. Finally we need to understand how what we do know—whether its scientific, technological, or educational—can be applied effectively to ensure that our citizens and our communities can look forward to a secure and prosperous future in this globalized economy.

This hearing represents a second step along that path. On May 22, this Subcommittee heard suggestions offered from a variety of perspectives on how to structure incentives so that U.S. firms will maintain and expand, at home in America. Today, we will hear about what has happened when we have failed at this in the past, and about the efficacy of our efforts to aid the recovery of those individuals and communities who have directly paid the price.

We are fortunate to have with us witnesses who speak from widely varied experience:

- John Russo—an academic who has lived through, and studied, one of the leading episodes of de-industrialization in America, that affecting Youngstown, Ohio;
- Frank Morgan—an attorney who has represented displaced workers whose applications for Trade Adjustment Assistance, or TAA, have been denied by the Labor Department;
- Howard Rosen—one of the leading advocates of TAA, who will report on the program's shortcomings and put forward a national strategy for dealing with economic dislocation;
- Jeannie Moore—a community college official who has played a leading role in one of the most striking community turnarounds in the country, that of Kannapolis, North Carolina;
- Thomas Palley—an economist who has long studied globalization and will assess our options for shaping its influence and its addressing its effects; and
- Ms. Diana Furchtgott-Roth—a senior fellow at the Hudson Institute in Washington, DC. She earlier served at chief economist of the U.S. Department of Labor and as chief of staff of the President's Council of Economic Advisers.

This is a complex topic. Coming to grips with it will involve challenging received wisdom and long-held assumptions and replacing them with original thinking and novel ideas. But the difficulty of the task is no excuse for shrinking from it.

Now I recognize the distinguished Ranking Member from Wisconsin, Mr. Sensenbrenner.

Mr. SENSENBRENNER. Thank you very much, Mr. Chairman.

Today's hearing is the Subcommittee's second hearing on globalization in a month. These hearings closely follow a series of four hearings on the same topic in the Science and Technology Committee. In addition to these hearings and over the vocal objections from the Minority, the Committee also hired an outside consultant and paid $20,000 for, "studies and advice," on issues of globalization.

In March, 2007, Chairman Gordon wrote Members of the Committee and asked that they support the consulting agreement. In his letter he argued that the consultant, Dr. Ron Hira, had unique knowledge and experience in this field that could not easily be duplicated by the Committee staff.

Without doubting Dr. Hira's qualifications, the Minority questioned the need to hire him as a consultant. With numerous hearings planned, why not invite Dr. Hira to testify? And why did the Committee have to enter into a costly consulting agreement when experts routinely testify before Congress for free?

Those questions are renewed now that we have seen the Majority's report. That report was due to the Committee by December 31, 2007. It was presumably delivered on time, but the Minority was not given a copy until a few weeks ago when it was made publicly available as a Committee print. This print has an official look to it just like our hearing records and lists all of the Committee Members names on it, even though half of us never saw it before it was released.

The report itself was 12 pages long and included five full pages of background. This report which reportedly could not have been accomplished by the Committee staff itself, is little more than a summary of the Committee's hearings on this topic.

I would like to enter this report into the record for taxpayers to decide if their $20,000 is well spent. I look forward to hearing from today's witnesses, who like most Congressional witnesses, have generously agreed to appear today without charge. I must say that I have a meeting in my office with a constituent at 1:30 which I can't break, but my staff will inform me of what each of the witnesses say, and if I can make it back, I will be happy to do so.

And I ask unanimous consent that this Committee print, which represents a waste of $20,000, be included in the record.

[The prepared statement of Mr. Sensenbrenner follows:]

PREPARED STATEMENT OF REPRESENTATIVE F. JAMES SENSENBRENNER JR.

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Chairman MILLER. Without objection the Committee print will be entered into the record, not necessarily as a waste but as Mr. Sensenbrenner's evidence. And I don't know anything about it. This all has to do with something done at the Committee level and not the Subcommittee, but we will enter that print in the record.

[*The information appears in Appendix: Additional Material for the Record.*]

Chairman MILLER. All additional opening statements by any Member on any topic, germane or not germane, to this subcommittee's work will be included in the record.

[The prepared statement of Chairman Gordon follows:]

PREPARED STATEMENT OF CHAIRMAN BART GORDON

I would like to thank Chairman Miller for holding this hearing on the very important topic of globalization. This hearing complements the work begun in the last session by the Technology and Innovation Subcommittee. Mr. Sensenbrenner referred to a small portion of that work, and I would like to take a moment to discuss the Committee consultant we hired in the first session.

Dr. Ron Hira was contracted to advise the Committee on the issue of outsourcing and offshoring of high skilled jobs and research and development. His work resulted in the Committee's holding four hearings on the issue over a period of six months: *The Globalization of R&D and Innovation, Part I; The Globalization of R&D and Innovation, Part II: The University Response; The Globalization of R&D and Innovation, Part III: How Do Companies Choose Where to Build R&D Facilities?;* and, *The Globalization of R&D and Innovation, Part IV: Implications for the Science and Engineering Workforce.* Those hearings were printed together in a hearing print entitled, "The Globalization of R&D and Innovation." This print is 359 pages long.

After the series of hearings was completed, Dr. Hira worked with Committee staff to compile a brief report containing policy recommendations based on the testimony we received at the four hearings. This summary document is the 12 page report my colleague from Wisconsin refers to.

Dr. Hira's work with us over those many months, along with the work of our talented staff, produced excellent hearings on a very important topic to Americans everywhere.

I would again like to thank my friend from North Carolina for maintaining the Committee's focus on the issue of globalization. This is an issue that isn't going away, and the Committee will continue its work in this area.

[The prepared statement of Mr. Costello follows:]

PREPARED STATEMENT OF REPRESENTATIVE JERRY F. COSTELLO

Mr. Chairman, I would like to thank you for overseeing this hearing today and for your leadership of this subcommittee. The Science Committee's jurisdiction over the competitiveness of America's workforce is an especially important one as our economy has suffered as U.S. jobs have been moved overseas and unemployment rates continue to rise.

While the American economy remains relatively strong, the average American worker's wagers have stagnated, and most manufacturing workers that lose their jobs make less in their next job.

This committee must ensure that Trade Adjustment Assistance, our primary program to combat the effects of fewer manufacturing jobs, is administered efficiently and fairly in order to achieve its objectives.

We must focus our intentions towards the goal of rebuilding the American job base. I believe part of the solution to the problem of declining competitiveness lies in successfully training the American workforce to provide the skills needed to survive the demands of the 21st century economy.

I look forward to our testimony today, Mr. Chairman, and I would like to thank our witnesses for taking to time to discus these important issues with the Subcommittee today.

[The prepared statement of Ms. Johnson follows:]

PREPARED STATEMENT OF REPRESENTATIVE EDDIE BERNICE JOHNSON

Thank you, Mr. Chairman. Globalization has in some ways been good for our nation, but for our manufacturing sector, it has been detrimental.

Today's hearing is designed to assess the impact on workers and communities when jobs move abroad.

Should the Federal Government provide Trade Adjustment Assistance to support workers whose jobs have been sent offshore?

Globalization is changing the way Americans view the future of business in our nation. Educational institutions question the jobs of the future, and how to go about adequately preparing tomorrow's worker to compete in a global workforce market.

We will determine the impact that community colleges have in working with local businesses to retrain displaced workers, and how trends in retraining are changing with time.

Mr. Chairman, I have always asserted that a good education is the root of future success.

It is my desire for the students of today to obtain high-paying jobs that are fulfilling and that offer long-term financial security.

This forward-thinking committee is in a position to steer our research and education efforts in directions to keep us globally competitive.

I want to welcome our panel of distinguished witnesses.

Chairman MILLER. It is now my pleasure to introduce our witnesses.

First Dr. John Russo is Co-Director of the Center for Working-Class Studies and Coordinator of the Labor Studies Program at the Warren G. Williamson School of Business Administration at Youngstown State University in Youngstown, Ohio.

Mr. Frank H. Morgan is an Attorney with the Washington Office of the Law Firm White & Case.

Mr. Howard F. Rosen is the Executive Director of the Trade Adjustment Assistance Coalition and a visiting fellow at the Peterson Institute for International Economics in Washington.

Ms. Jeanie Moore, who may be called upon to translate the Chairman's remarks to the rest of those here in the Committee room, is the Vice President of Continuing Education Programs at Rowan-Cabarrus Community College in Salisbury, North Carolina.

Dr. Palley, thank you for joining us. Dr. Thomas I. Palley is the Founder of Economics for Democratic and Open Societies Project in Washington.

And Ms. Diana Furchtgott-Roth is the Director of the Center for Employment Policy and senior fellow at the Hudson Institute in Washington.

Each of you will have five minutes for your oral testimony. Your written testimony will be included in the record of the hearing. When you complete your testimony, we will have questions. Each Member will have five minutes to question the panel.

It is the practice of the Subcommittee to take testimony under oath, although with this kind of hearing prosecutions for perjury seem unlikely. Do any of you have an objection to being sworn in, to taking an oath?

All right. The Committee also provides that you may be represented by counsel, although, again, this hearing makes that somewhat less pertinent than some of our other hearings. Are any of you represented by counsel today?

If you would now all please stand and raise your right hand. Do you swear to tell the truth and nothing but the truth? Okay. The witnesses the witnesses all took the oath, and Dr. Russo, would you now begin?

STATEMENT OF DR. JOHN B. RUSSO, COORDINATOR, LABOR STUDIES PROGRAM; CO-DIRECTOR, CENTER FOR WORKING-CLASS STUDIES, WILLIAMSON COLLEGE OF BUSINESS ADMINISTRATION, YOUNGSTOWN STATE UNIVERSITY, OHIO

Dr. RUSSO. My name is John Russo, and I am a Professor of Labor Studies at the Warren P. Williamson Jr. College of Business Administration and Co-Director of the Center for Working-Class Studies at Youngstown State University. I am also the co-author with Sherry Linkon of the book, *Steeltown USA: Work and Memory in Youngstown.* I want to thank the House Committee on Science

and Technology for giving me this opportunity discuss my research on de-industrialization and its impact on local communities such as Youngstown, Ohio.

This spring I was interviewed by more than 20 journalists from around the world on working-class voting patterns and on local and State economic issues. The attention is not new. Every four years reporters and candidates return to Youngstown to test conventional wisdom about economic renewal and the political responses in the face of de-industrialization. Since the 1980s, Youngstown has become the poster child for de-industrialization, losing 50,000 jobs in steel and steel-related industries. This decade the Youngstown area has continued to hemorrhage jobs, most recently because of the downsizing of the automobile industry with Delphi and General Motors. Since 2000, in fact, the State of Ohio has experienced the worst job losses, reduced standards of living, and social disruptions associated with unemployment since the Great Depression. But what seems different this time is the reports seem to understand what Sherry Linkon and I wrote in our book, *Steeltown USA:* the Youngstown story of the 1980s has become Ohio's and the America's stories today.

De-industrialization undermines the social fabric of communities and nation-states. The social costs of de-industrialization include the loss of jobs, homes, and health care; reductions in tax base, which lead in turn to reductions in necessary public services such as police and fire; declines in non-profits and cultural resources, decaying local landscapes; and increases in crime, both immediately and long-term; increase in suicide, drug and alcohol abuse, family violence, and depression; and the loss of faith in institutions such as government, business, unions, churches, and traditional political organizations.

So job losses do not affect individuals only, although, it touches many who having dedicated their lives and sometimes their health to employers now feel betrayed and economically expendable. As one steelworker suggested to me, "We are too old to work and too young to die."

Rather, de-industrialization is a systemic problem that affects the identity of whole families and communities and the Nation. De-industrialization brings with it a great deal of cynicism and underlying discontent that may not be apparent to outsiders. Economic cheerleading and bootstrap journalism that labels large-scale job loss as "creative destruction" just reinforces a community's identity loss. When you lose your identity, other people define who you are, and you get blamed for your own situation.

Nor can simple government interventions ameliorate the dramatic social costs of de-industrialization and offshoring. Attempts to revitalize our area have largely failed. Many represent what we might call the economics of desperation. Many displaced steelworkers in Youngstown in the 1980s got trained or retrained in refrigeration. There are no refrigeration jobs in Youngstown, Ohio. Between 1992 and 2000, nine percent of the economic growth in the area was the result of building prisons.

Youngstowners have begun to understand that the current economic thinking and political decision-making have often exacerbated these problems. For example, technologies developed with

public research dollars are being used to offshore jobs. Tax incentives to multi-nationals are being used to export jobs. In both cases, public policy is contributing to putting hard-working Americans out of work.

When challenged, many politicians and corporate leaders tender platitudes about long-range economic adjustments and suggest that displaced workers train for jobs that either don't exist or will be moved offshore in the next wave of economic change. Increasingly, Americans understand that they are being sacrificed at the altar of economic theory. They reject the argument that de-industrialization and offshoring are part of the natural economic order and that job losses and declining wages are an inevitable part of globalization.

Instead, they see themselves as victims of conscious decisions by corporate leaders and government officials, and they are resentful. No longer will they accept the short-term solutions and amelioration efforts. While important, such approaches are ultimately ineffectual. Americans are beginning to recognize that we are in a new period of global capitalism and that the resulting problems and issues are systemic and will require systemic solutions.

If we are to reach solutions, we must raise the following questions: What is the purpose of the corporation? What is the relationship between markets, corporations, and nation-states? How is international trade structured? How can trade and tax policies better reflect changes in the global economy? Anything less than serious answers to these difficult questions will be window dressing. Without serious answers, cities like Youngstown will continue to lose faith in the American dream.

In summary, while we need programs that more widely share benefits and risks from globalization and offshoring, I would argue that the global economy demands new forms of corporate and international regulation that will prevent some nation-states and some corporations from engaging in economic blackmail by playing one country or one workforce against another. We can no longer afford to tinker with economic and trade policy or enact reforms that are simply window dressing. Without systemic reform, growing discontent and the incipient rebellion in American politics over globalization and de-industrialization will only grow and breed a new politics of resentment.

[The prepared statement of Dr. Russo follows:]

PREPARED STATEMENT OF JOHN B. RUSSO

My name is John Russo and I am a Professor of Labor Studies at the Warren P. Williamson Jr. College of Business Administration and Co-Director of the Center for Working-Class Studies at Youngstown State University. I am also the co-author with Sherry Linkon of the book, *Steeltown USA: Work and Memory in Youngstown.* I want to thank the House Committee on Science and Technology for giving me this opportunity to discuss my research on de-industrialization and its impact on local communities such as Youngstown, Ohio.

This spring I was interviewed by more than 20 journalists from around the world on working-class voting patterns and on local and State economic issues. This attention was not new. Every four years, reporters and candidates return to Youngstown to test conventional wisdom about economic renewal and political responses in the face of de-industrialization. Since the 1980s, Youngstown has been the poster child for de-industrialization, losing 50,000 jobs in steel and steel-related industries. This decade the Youngstown area has continued to hemorrhage jobs, most recently through the downsizing of Delphi Automotive and GM (Lordstown). Since 2000, the

State of Ohio has experienced the worst job losses, reduced standards of living, and social disruptions associated with unemployment since the Great Depression.[1] But what seems different this time is that reporters understand what Sherry Linkon and I wrote in *Steeltown USA:* Youngstown's story has become both Ohio's and America's story today.[2]

De-industrialization undermines the social fabric of communities and nation-states. The social costs of de-industrialization include the loss of jobs, homes, and health care; reductions in tax base, which in turn lead to reductions in necessary public services like police and fire protection; declines in non-profits and cultural resources; decaying local landscapes; increases in crime both, immediately and long-term;[3] increases in suicide, drug and alcohol abuse, family violence, and depression; and loss of faith in institutions such as government, business, unions, churches, and traditional political organizations.

So job loss does not affect individuals only, although it touches many who, having dedicated their lives and sometimes their health to employers, now feel betrayed and economically expendable. As one steelworker suggested to me, "We are too old to work and too young to die."

Rather, it is a systemic problem that affects the identity of whole families, their communities, and the Nation. De-industrialization brings with it a great deal of cynicism and an underlying discontent that may not be apparent to outsiders. Economic cheerleading or "bootstrap journalism" that labels large-scale job loss as "creative destruction" just reinforces the community's identity loss: When you lose your identity, other people define who you are, and you get blamed for your own situation.

Nor can simple governmental interventions ameliorate the dramatic social costs of offshoring and de-industrialization. Attempts to revitalize our area have largely failed: many represent what we might call the economics of desperation. Many displaced steelworkers in Youngstown got trained in refrigeration, but there were no jobs in refrigeration. Between 1992 and 2000, about nine percent of the economic growth in the area was a result of building prisons.

Youngstowners have begun to understand that the current economic thinking and political decision-making have often exacerbated the problem. For example, technologies developed with public research dollars are being used to offshore jobs. Tax incentives to multinationals are being used to export jobs. In both cases, public policy is contributing to putting hard-working Americans out of work.

When challenged, many politicians and corporate leaders tender platitudes about long-range economic adjustments and suggest that displaced workers train for jobs that either don't exist or that will be moved offshore in the next wave of economic change.[4] Increasingly, Americans understand they are being sacrificed at the altar of traditional economic theory. They reject the argument that de-industrialization and offshoring are part of the "natural economic order" and that job losses and declining wages are an inevitable part of globalization. Instead, they see themselves as victims of conscious decisions by corporate leaders and government officials, and they are resentful. No longer will they accept short-term solutions or amelioration efforts. While important, such approaches are ultimately ineffectual. Americans recognize that we are in a new period of global capitalism and that the resulting problems and issues are systemic and will require systemic solutions.

If we are to reach solutions, we must raise the following questions: What is the purpose of the corporation? What is the relationship between markets, corporations, and nation-states? How is international trade structured? How can trade and tax policies better reflect changes in the global economy? Anything less than serious an-

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[1] Charles W. McMillion, "Ohio's Job Losses: 2000–2007 Worst since the Great Depression," MBG Information Services, Washington, D.C., February 2008.

[2] Forester Research, a consulting firm, estimates that 3.4 million white-collar jobs will be sent offshore between 2003 and 2015. The estimate of the exodus includes 542,000 computer jobs, 259,000 management jobs, 191,000 architectural jobs, 79,000 legal jobs, and 1.6 million back-office jobs. Outsourcing can also have a negative effect on the workers who remain in the U.S. A study by three Harvard economists estimates that for every one percent that employment falls in a manufacturing industry because of moving overseas, wages fall by five-tenths of one percent for workers who remain. As the recent, concessionary bargaining at American Axle, suggests those numbers may be an underestimate.

[3] In the early 1990s, the per capita murder rate in Youngstown was among the highest in the Nation. Interestingly, criminal justice experts determined that the murders were being committed by young adults that were born between 1977 and 1984, the most intense period of the de-industrialization. But for the mill closings, Youngstowners of this age might have found well-paying work in the steel industry.

[4] Training and education have been the hope for many. But I in good faith cannot tell my students that just because they get a BA or an MBA now, or a degree in engineering, they are going to do better than their parents. A sense prevails that there is a decline in America, and that only by accepting a lowered standard of living will we be able to compete.

swers to these difficult questions will be window dressing. Without serious answers, cities like Youngstown will continue to lose faith in the American Dream.

Let's just take the first few questions. What is the purpose of the corporation? Is it merely a legal entity whose purpose is to maximize profits for shareholders by moving inputs and assets around like pieces on a chess board? Or do corporations have reciprocal responsibilities with shareholders, managers, employees, and nation-states in the creation of value? As earlier speakers before this Committee have suggested, current practice appears to be in line with the former.

How we answer the first question informs how we approach our second question, on the relationship between corporations, nation-states, and markets. If we believe that corporations have little social responsibility other than creating wealth, then government should support free markets globally and pay scant attention to forms of government or working conditions in and between countries. In such a world, corporations can become as powerful as nation-states and override democratic values. If, however, we believe that government needs to balance reciprocal relationships and provide a social safety net for capitalism, then economic and trade policies must be systemic and proactive. Governments should make decisions that benefit all citizens and hold corporations accountable to all stakeholders, not just a few. For example, government leaders need to take seriously labor, environmental, and political conditions in all countries that can lead to unfair trade.

In summary, while we need programs that more widely share the benefits and the risks arising from globalization and offshoring, I would argue that the global economy demands new forms of corporate and international regulation that will prevent some nation-states and corporations from engaging in economic blackmail by playing one country or one workforce against another. We can no longer afford to tinker with economic and trade policy or enact reforms that are simply window dressing. Without systemic reform, the growing discontent and incipient rebellion in American politics over globalization and de-industrialization will only grow and breed a new politics of resentment.

BIOGRAPHY FOR JOHN B. RUSSO

John Russo is the Coordinator of the Labor Studies Program in the Williamson College of Business Administration at Youngstown State University. He received his doctorate from University of Massachusetts, Amherst, where he also served as a postdoctoral research fellow at the Labor Relations and Research Center. Dr. Russo has written widely of labor and social issues and is recognized as a national expert on labor unions and working-class issues. His current research interests involve two book length projects, *Who Will Protect Worker Rights?: Unions and the Use of Codes/CSR, Capital Strategies, Framework Agreements and Strategic Campaigns* and an historical study of the famous GM (Lordstown) Assembly plant. His most recent publications are a book co-authored with Sherry Linkon, *Steeltown, USA: Work and Memory in Youngstown* (2002). Also with Sherry Linkon, an edited book entitled *New Working-Class Studies* was published in 2005 by Cornell University Press. For his many activities, Dr. Russo is one of the few professors at YSU to have ever received Distinguished Professorship Awards in each of three areas: research and scholarship, teaching and public service.

Dr. Russo is also a founder and the Co-Director of the Center for Working-Class Studies at Youngstown State University. The Center is an interdisciplinary center for research, teaching, and community activity on working-class life, work, culture, and thought. Since its inception, the CWCS has provided a regional and national forum for scholarly activities; supported YSU faculty research; fostered collaborations within the academic institution and between the university and community; developed an annual lecture series; and become a national and international clearinghouse for information on working-class culture and pedagogy. For its work, the Center has been the recent recipient of two major Ford Foundation grants.

Chairman MILLER. Thank you, Dr. Russo.

Mr. Morgan.

STATEMENT OF MR. FRANK H. MORGAN, ATTORNEY, WHITE & CASE LLP, WASHINGTON, D.C.

Mr. MORGAN. Good afternoon, Chairman Miller and Members of the Committee. My primary practice area is in the international trade disputes, and I must say that my remarks today are my own and do not reflect those of my firm or its clients. And I thank Mi-

chael O'Connor and Sara Sargeantson whose assistance made my testimony possible.

Thank you, Mr. Chairman, for inviting me to offer my experience and to convey the concerns of countless frustrated workers who have unsuccessfully petitioned the Employment and Training Administration [ETA] of the Department of Labor for Trade Adjustment Assistance, TAA.

I know this committee is considering broader and more fundamental issues surrounding globalization. Regardless of one's views on the merits of free trade, it is a no-brainer to make sure that the Department of Labor investigates each TAA claim and that workers who are entitled get prompt assistance.

Congress has directed the ETA to investigate each petition and to do so with the utmost regard for the workers. In preparing this testimony I came across a startling statistic. From 2002 to 2005, approximately 45 cases were litigated at the Court of International Trade, and in all but four there were reversals of Labor's decision not to certify. Since 2005, there have been a further 15 cases litigated, resulting in reversals of Labor's decision not to certify. Such a large number of reversals in the face of further scrutiny shows that Labor is not conducting the investigation that Congress directed it to do in the first instance. And while this litigation has dragged on, Labor has denied workers the relief to which they are entitled and need.

The Court of International Trade has written much about this topic, and I commend anyone who is concerned with the problem to read Judge Ridgway's decision in *BMC Software,* which I have attached to my written materials.

My written testimony elaborates fully on the problems that exist in Labor's investigation of TAA petitions, and I summarize those here today. In cases that I have litigated and those I have analyzed, the failure of Labor to investigate starts at the Agency level and consists of a complete failure to conduct a basic investigation beyond the four corners of the information provided in the petition. Often the record consists of a few e-mail messages and a few summaries of telephone calls. There is no excuse for this, and I have practiced before many other agencies, and none of them would call this an administrative record.

This is even more disturbing when you consider the fact that Labor is conducting an investigation that is not supposed to be adversarial in nature. Labor is supposed to be looking out for the interests of the workers. For TAA to serve its intended purpose, the system has to function properly at the agency level, and it will not do so until Labor conducts a thorough investigation of each petition.

An unsuccessful TAA petitioner at Labor faces three options: appeal immediately to the Court of International Trade (CIT), seek administrative reconsideration, or give up. Labor sends a denial letter that informs the petitioner of their right to administrative consideration but not of their right to seek a Court appeal. There is no excuse for Labor's failure to inform workers of the right to appeal, and I fear that many give up unaware of that right.

For the few cases that do eventually make it to the Court of International Trade, the TAA petitioner faces a whole new round

of challenges, frustration, and delay. The average case at the CIT took approximately 354 days to resolve. Contrast that with the fact that Congress contemplated that these decisions would be made within 40 days of the filing of the petition by the Department.

In almost every case Labor will ask the CIT's permission to conduct what is known as a "voluntary remand proceeding." In essence, Labor will go back and revisit the facts and reconsider its decision.

Aside from being a concession that the agency's decision isn't supported by the investigation that it conducted, it adds further delay to the process of up to 60 days or more. More disturbing, Labor often uses these proceedings as a means of bullet-proofing its initial decision not to certify. This means multiple Court-directed remands are necessary to get Labor to do what a reasonable decision-maker would have done from the outset. Labor engages in several other litigation tactics that cause delay, including implausible interpretations of the law and the facts. Each day of delay makes an eventual Court victory less meaningful for the workers.

The problems with Labor's investigations and subsequent litigation tactics are widespread. My written testimony contains excerpts from several CIT judges criticizing Labor on this score. The Judiciary has done its level best, but the problem persists and has persisted irrespective of which party occupies the Executive Branch. So in my view, the solution requires legislative pressure and changes to the law.

To conclude, the biggest problem is ETA's conduct and approach to investigations, and fixing this does not require any changes to the law. Congress simply must hold the agency accountable. Several changes to the law could help, including establishing swift and strict timeframes, allowing for more meaningful participation by the workers and their counsel in remand proceedings, and clarifying that the CIT has the authority to order Labor to certify workers.

Thank you, Mr. Chairman and Members of the Committee, for affording me the honor of representing the interests of hard-working men and women of America who have been failed by the very agency that Congress designated to protect their interests.

[The prepared statement of Mr. Morgan follows:]

PREPARED STATEMENT OF FRANK H. MORGAN

Good afternoon Mr. Chairman and Members of the Committee. My name is Frank Morgan and I am an attorney at the law firm of White & Case LLP where I practice primarily in the area of international trade disputes. My remarks today are necessarily my own and do not reflect the views of my firm or our clients. I thank Michael O'Connor and Sara Sargeantson, two summer associates at my firm whose assistance made this testimony possible.

Thank you for inviting me to offer my experience and to convey the concerns of the many frustrated workers who have unsuccessfully petitioned the Employment and Training Administration ("ETA") of the Department of Labor for trade adjustment assistance ("TAA").[1] The primary mission of the Department of Labor is to protect and promote the American worker's interests. It should go without saying that in administering TAA, the ETA must act with the utmost regard for the American workers who seek assistance. But, all too often, the ETA fails to do so. And regardless of one's views about international trade, ensuring that workers who are adversely affected by trade get prompt retraining and transitional assistance is a

[1] Throughout my testimony, I refer interchangeably to the agency as "the ETA" or Labor.

no brainer. In preparing this testimony I came across a startling statistic: from 2002–2005, approximately 45 TAA cases were litigated, and in all but four, Labor ultimately certified the workers. That is shocking and it shows that Labor is not fulfilling the responsibilities that Congress entrusted to it.

Before I joined White & Case, I served as a law clerk to the Honorable Judith M. Barzilay at the U.S. Court of International Trade ("CIT"). It was during my clerkship that I first encountered the difficulties unsuccessful TAA petitioners face. In addition to working for an outstanding jurist, I had the privilege of knowing many other judges on the court. A review of their decisions reflects just how frustrated and disturbed most (if not all) of the CIT judges are with ETA's handling of TAA cases. Among a frustrated bench, Judge Delissa A. Ridgway stands out for her efforts to call attention to the problem and to catalogue the breadth and enduring nature of it. **Attachment 1** of my written testimony contains Judge Ridgway's decision in *Former Employees of BMC Software, Inc. v. U.S. Sec'y of Labor,* 454 F. Supp.2d 1306 (Ct. Int'l Trade 2006) which is a must read for anyone that is concerned about this problem. My remarks today are mere footnotes to the expert treatment Judge Ridgway already has given to the topic.

I. DIFFICULTIES FACED BY THE UNSUCCESSFUL TAA PETITIONER

My testimony focuses on the unsuccessful TAA applicant both at the agency level and in the subsequent battles to use the judicial process to overturn an incorrect agency decision. Without question (as I am sure Labor would be quick to note), many workers are successful in petitioning for TAA. But—even if Labor reaches the correct result much of the time—the workers who succeed at the agency level are the easy cases, where little or no independent inquiry by the agency is necessary: the cases where it would be patently obvious to anyone that the workers satisfy the criteria for TAA certification; the cases where the workers have themselves compiled and neatly served up for Labor's convenience all the evidence required to support certification; and (perhaps) the cases where certification of the workers is the politically expedient thing to do.

The problem arises in all the other cases: the cases where it is not immediately obvious whether the workers are entitled to TAA, where all the evidence is not served up to the agency on a silver platter—the cases where a true investigation is required. These are the cases where the agency fails the workers. Labor often reaches the wrong result because it has conducted an inadequate investigation. It is one thing to deal with the easy cases, and an entirely different one to resolve those that require a deeper investigation. But Congress did not intend for Labor to shirk the difficult investigations.

Of course, the statute does not entitle every petitioning worker to be certified for TAA. But, as the Court's opinion in *BMC* emphasized, "every worker *is* entitled to a thorough agency investigation of his or her claim—without being forced to resort to the courts. The law mandates no less."[2] It is for these reasons that I believe my focus on the unsuccessful TAA applicant is appropriate.

In order to understand the difficulties unsuccessful TAA applicants face, it is necessary to understand how a case starts, proceeds through the ETA, and how it may, eventually, end up in the judicial system. TAA initially is sought at the agency level, specifically, at the ETA. A petition for TAA generally is filed by three or more workers who have been laid off by a firm, a union representing workers that have been laid off, or the firm that has laid off workers. Eligibility for TAA is governed by statute. To grossly summarize the law, Labor is supposed to certify workers for TAA if one of the following three conditions is met: 1) there has been an increase in imports that caused job losses, or 2) the workers' firm shifted production to a country that has a free trade or other preferential trade agreement with the United States, or 3) the workers' firm shifted production to a foreign country and there have been subsequent imports of that product into the U.S. market.[3] If Labor does not certify, the workers have the right to appeal that decision to the CIT. I know that this committee has been examining the effects of globalization, and I thought the Members might be interested to know that appeals involving a shift in production to a foreign country have accounted for approximately 22 of 40 appeals filed with the CIT since 2005.

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[2] *Former Employees of BMC Software, Inc. v. U.S. Sec'y of Labor,* 454 F. Supp.2d 1306, 1357 (Ct. Int'l Trade 2006) (*quoting* 29 C.F.R. § 90.12).

[3] Workers who are employed by a firm that supplies components to a firm that has been certified for TAA also may be eligible. *See* 19 U.S.C. § 2272(b). Please see **Attachment 2** for the full text of the statutory provision governing eligibility for TAA.

A. Difficulties for TAA Petitioners at the Agency Level

At the agency level, TAA petitioners almost never have counsel representing them. As a consequence, individuals who often have little or no experience with federal law and agency regulations are largely relying on the ETA to perform its functions with the utmost regard for protecting their interests. Indeed, as the *BMC* opinion pointedly observes, that is precisely the situation that Congress contemplated:

> Congress designed TAA as a *remedial* program, recognizing that petitioning workers would be (by definition) traumatized by the loss of their livelihood; that some might not be highly-educated; that virtually all would be *pro se*; that none would have any mastery of the complex statutory and regulatory scheme; and that the agency's process would be largely *ex parte*. Congress did not intend the TAA petition process to be adversarial. Nor did Congress intend to cast the Labor Department as a 'defender of the fund,' passively sitting in judgment, ruling 'thumbs up' or 'thumbs down' on whatever evidence petitioning workers might manage to present.
>
> Quite to the contrary, the Labor Department is charged with an *affirmative* obligation to *proactively* and thoroughly investigate all TAA claims filed with the agency—and, in the words of its own regulations, to 'marshal all relevant facts' to make its determinations.[4]

Because counsel does not become involved until much later in the process we typically only see the shortcomings in Labor's initial investigations after the case has been appealed to the CIT—and the shortcomings can be tremendous. For example, in the first TAA case that I litigated, the ETA determined based on inconclusive and inaccurate information that the workers were service providers, and denied TAA on those grounds. It took almost four years and several court orders to get the ETA to correct that decision. Unfortunately, by that point, TAA was meaningless for my clients. For TAA to serve its intended purpose, the system has to function properly *at the agency level.* As I will discuss later, this will not occur until the ETA fully accepts the mandate that Congress has given it to conduct a full and thorough investigation—*in every case.*

Congress has not set forth specific instructions on how Labor is to conduct its proceedings, but Congress has clearly expressed its intent that Labor is to conduct an *investigation.*[5] By providing Labor with the power to subpoena witnesses and documents, Congress evinced a clear intent that the investigation should not be cursory.[6] Labor's investigations, however, are often *pro forma* at best, and fall far short of what Congress intended.

In addition to mandating that Labor conduct an investigation, Congress has recognized that the ETA must conduct its investigation swiftly, providing Labor with 40 days to determine whether the petitioners are eligible for TAA.[7] In fact, Congress shortened the period to 40 days from 60 days in 2002. Yet Labor, by regulation, has granted itself the authority to conduct reconsideration proceedings that can greatly extend the time for making its "final" determination beyond 40 days.[8] If a worker chooses to pursue this process, it can add up to 90 additional days to the process at the agency level.[9]

It is deeply disturbing—and, likely, telling—that the standard form letter that Labor uses to inform workers that their TAA petition has been denied advises the workers only of the ability to seek administrative reconsideration before the agency, and conveniently fails to inform them of their right to seek immediate judicial review instead.[10] The vast majority of unsuccessful TAA petitioners simply end the

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[4] *Former Employees of BMC Software, Inc. v. U.S. Sec'y of Labor,* 454 F. Supp.2d 1306, 1357 (Ct. Int'l Trade 2006) (*quoting* 29 C.F.R. § 90.12).

[5] *See* 19 U.S.C. § 2271(a)(3) (requiring Labor to publish notice of the initiation of an *investigation*).

[6] *See* 19 U.S.C. § 2321(a).

[7] *See* 19 U.S.C. § 2273(a).

[8] *See* 29 C.F.R. § 90.18. While Labor claims that the authority to conduct an administrative reconsideration is provided for by the *Trade Act of 1974,* as amended, my colleagues and I have been unable to locate the relevant provision in the statute.

[9] *See* 29 C.F.R. §§ 90.18(c)&(g) (providing Labor with 15 days to decide whether reconsideration is warranted and, if so, 45 additional days to make the determination). In my view, the investigation that Labor performs on reconsideration is equally inadequate, so the additional time provides a TAA applicant with little benefit, and merely delays the time before an appeal is made.

[10] My understanding is that Labor used to inform petitioners of that right and its omission from current notifications can only be taken as an attempt to limit petitioners' right to avail themselves of the judicial system.

process at this point, unaware of their right to appeal or too exhausted and frustrated to continue.

For the unsuccessful TAA petitioners with any fight left in them, there is one last hurdle, the 60 day deadline for filing an appeal at the CIT.[11] This deadline is extremely short especially when considering that most aggrieved persons are not represented by an attorney. Congress should consider extending the time for filing an appeal to reflect this reality.

B. Difficulties Faced After the Administrative Process Has Concluded and Litigation Begins

Once a TAA case gets to the CIT, it takes too long to litigate, and—even then—the ETA generally fails to carry out its responsibilities with the utmost regard for the workers. Fully litigated TAA cases from 2005 to present took an average of 354 days to resolve, with one case lasting 954 days, or a little over two and one-half years. As I mentioned earlier in my testimony, the first case I litigated took four years to resolve. In my case and in at least 15 of the cases litigated since 2005, there was a change in Labor's decision. Instead of receiving TAA within 40 days, as Congress intended, these workers were unjustly denied TAA for far too long, and all because Labor's investigation was inadequate. During this time, those unsuccessful TAA petitioners suffered the full brunt of the adverse effects attendant to being laid off, and even though the court action was successful, it can never remedy the harm that workers suffer due to delay in receiving the TAA benefits to which they were entitled.

As the CIT observed in the *Chevron* case, the consequences of agency delays in certification can be profound—sometimes, quite literally, life-or-death:

> There is a very human face on [TAA cases]. Workers who are entitled to trade adjustment assistance benefits but fail to receive them may lose months, or even years, of their lives. And the devastating personal toll of unemployment is well-documented. Anxiety and depression may set in, with the loss of self-esteem, and the stress and strain of financial pressures. Some may seek refuge in drugs or alcohol; and domestic violence is, unfortunately, all too common. The health of family members is compromised with the cancellation of health insurance; prescriptions go unfilled, and medical and dental tests and treatment must be deferred (sometimes with life-altering consequences). And college funds are drained, then homes are lost, as mortgages go unpaid. Often, marriages founder.[12]

The bottom line is this: Where displaced American workers seeking TAA benefits are concerned, litigation will never be an adequate substitute for Labor doing its job. For this reason, it is imperative for Labor to conduct a proper investigation in the first instance.

In large measure, Labor creates the delays in the litigation process by: 1) seeking a voluntary remand in virtually every case that is appealed, 2) making excessive requests for extensions, 3) failing to conduct the type of investigation (in the first instance and in response to court ordered remands) that Congress contemplated, 4) failing to interpret the statute in a good faith manner, consistent with the remedial nature of the TAA statute, 5) failing to concede that cases with similar facts should be resolved in a similar manner, and 6) failing to respect the CIT's authority. These failings suggest to me, and I am not alone in this view, that Labor is defaulting on its obligations to fulfill the responsibilities that Congress entrusted to it.

1. Labor Often Uses Voluntary Remand Proceedings to Support its Original Determination

In the cases I have litigated, the ETA has sought consent to conduct what is referred to as a voluntary remand proceeding. This means that Labor is asking the court for permission to conduct additional fact finding, clarify areas of confusion, and reconsider its decision. In other words, Labor is admitting that it did not do a proper investigation in the first instance. Moreover, in other cases that I have reviewed, it appears that Labor seeks a voluntary remand in almost every case. In contrast, other agencies that appear before the CIT rarely ask for voluntary remands. In short, the ETA's own actions at the CIT demonstrate that it is not conducting a proper investigation in the first instance.

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[11] *See* 19 U.S.C. § 2395(a).

[12] *Former Employees of Chevron Prods. Co. v. U.S. Sec'y of Labor,* 298 F. Supp. 2d 1338, 1349 (2003).

Adding to this frustration is the fact that Labor often does not conduct a better investigation after asking for the remand. Often the ETA conducts the remand investigation with an aim towards "bullet proofing" its original decision.[13] For example, in the *Former Employees of Merrill Corporation* Labor asked for 90 days to reconsider its original determination, the plaintiffs consented and the CIT granted the request.[14] A fundamental issue was whether the workers produced an article. Labor had originally contended that the workers provided a service; and thus, were not eligible for TAA. Yet in the voluntary remand proceeding, and despite requests that it do so, Labor did not even examine whether the workers' firm produced printed materials which would have qualified as articles. As the CIT noted, "Labor failed to undertake even a minimal investigation of Merrill's production of printed matter. The record is devoid of any information concerning the percentage of [printed documents]." [15]

2. Labor's Requests for Extensions Are Excessive

As I have explained earlier in my testimony, the TAA statute reflects Congress' considered judgment that 40 days is ample time for Labor to complete a thorough investigation of even the most complex TAA petition. But not only is the agency failing to fulfill that mandate, it is routinely seeking periods far in excess of 40 days to conduct its remand investigation—precious time on top of the time the ETA already had to conduct the initial investigation. In short, the agency's dilatory conduct in the course of litigation greatly compounds and exacerbates the effects of its failures and omissions in the conduct of its initial investigation. For the unsuccessful TAA petitioner, the feeling of frustration and anger builds each time Labor seeks an extension.

I have been involved in litigation (either in private practice or as a law clerk) with almost every agency over which the CIT has jurisdiction. Parties (both private and government) often seek extensions of time to perform certain acts. But Labor stands out both in terms of the number of extensions requested and the apparent lack of need for them. In the *Former Employees of Merrill Corporation* litigation, Labor sought two extensions of time to file various remand results.[16] Like Charlie Brown hoping to finally kick the football, we consented in the belief that Labor needed the time and was acting in good faith. Yet this proved not to be the case, as Labor reached the same result over and over.

In the TAA case I am currently litigating, Labor sought a voluntary remand (which it originally had 60 days to complete) and then asked for two extensions of time to file the remand results. We consented to the first because a legitimate reason was provided. We objected to the second because it was requested in the afternoon on the very day the remand determination was supposed to be filed with the CIT, and Labor did not even offer a reason for making the request. Labor eventually filed its remand determination with the CIT, again denying eligibility. We were disappointed with the result but not surprised given Labor's track record. What outraged us was what Labor did in those 70 days: seven e-mail messages (four of which were non-substantive), a few voice mail messages, and a visit to a website. This did not require seven days, much less 70.

Again, these are not isolated incidents. Labor typically has requested at least one extension in each fully litigated case since 2005, and has requested as many as six extensions in a single case. The requests averaged approximately 20 days each but some were as long as 90 days. This is troubling because the extension follows on what are almost always 60 or 90 day periods that already had been given to Labor. In my experience, other agencies do not request so many extensions for such lengths of time, and when they do, it is usually because the private parties also need additional time.

3. Labor Does Not Conduct Investigations in the Manner Congress Contemplated

As I discussed earlier, Labor does not conduct an adequate investigation in the first instance. In my experience, this does not change even after the case reaches the CIT. The ETA's failure to conduct an adequate investigation causes significant delays in the resolution of a CIT proceeding.

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[13] As I discuss below, even when the remand proceeding is ordered by the CIT, Labor sets out to justify its original determination.

[14] *See Former Employees of Merrill Corp. v. U.S. Sec'y of Labor,* Slip Op. 04–2, 2004 WL 34548 (Ct. Int'l Trade Jan. 4, 2004).

[15] *Former Employees of Merrill Corp. v. U.S. Sec'y of Labor,* 387 F. Supp. 2d 1336, 1346 (Ct. Int'l Trade 2005).

[16] Labor's counsel also sought extensions for various reasons. While the reasons given were understandable, the combined effect was to significantly delay the resolution of the case.

First, the amount of information that Labor obtains is insignificant and insufficient to resolve the issues that are presented in most cases. In the cases I have litigated, the investigation mainly consisted of a few e-mail messages and a few phone conversations. The agency record, even after several remand investigations, often consists of fewer than fifty pages after accounting for duplicative material. Moreover, when information supports a negative determination, Labor accepts it without question.

In contrast, other agencies with which I am intimately familiar (such as the International Trade Commission ("ITC") and Department of Commerce ("DOC")) obtain far more information in similar time frames, and critically assess it. I am convinced that Labor does not seek more information, and does not conduct the kind of investigation that Congress intended for fear that it will undercut the decision not to certify.

Second, Labor does not conduct its investigations in a manner that gives counsel for the workers a meaningful opportunity to participate. Labor does not provide information to counsel for the workers as it is obtained, but only after Labor has made and submitted its remand determination to the CIT. In contrast, the ITC and DOC release information that is submitted to the agency (or obtained by it) to parties on the same day or shortly thereafter. The *ex parte* nature of Labor's investigation, even within the context of an appeal, means that the workers' first opportunity to challenge the relevance, accuracy, and completeness of the information is after the case re-commences at the CIT. Not only does this cause further delay, but it suggests that Labor is not interested in arriving at the correct result. Counsel for employees of IBM referred to the manner in which Labor conducts its remand investigations as a "sham which lacked transparency and was conducted to reach a predetermined negative result."[17] Again, this suggests that Labor is not acting in accordance with the utmost regard for the workers, which is the mission that Congress entrusted to it. Indeed, when workers succeed in achieving TAA certification through litigation, it is only because the workers and their counsel have provided evidence to the ETA, which the ETA appears to be wholly unwilling to obtain on its own. Accordingly, Labor's standard practice of excluding the workers and counsel from playing an active role in the remand investigation in effect postpones an accurate determination on the workers' entitlement to TAA benefits, and is indefensible.

Third, Labor arbitrarily relies on information that supports its decision to deny TAA certification, and disregards that which does not. For example, the CIT has criticized Labor for over-reliance on employer provided information that supported no certification for TAA when there was contradictory information submitted by the workers that contradicted it and supported certification.[18] If Labor uniformly relied on employer information at least there would be consistency, but even this is not the case. In the cases I have litigated, the employer generally was supportive of the workers' request for TAA, and in one instance, the employer even filed the TAA petition and continued to press for Labor to find that the employees were eligible. Labor chose to ignore the employers' statements and information favorable to TAA certification. Yet had the employers submitted information unfavorable to certification, I suspect Labor would have relied on the information. Again, Labor's pattern of seizing on any evidence that supports its decision to deny benefits—and its utter disregard for that evidence which supports certification—demonstrates a lack of good faith in resolving the dispute and adds to the delay in the resolution of the case.

4. Labor Arrives at Interpretations of the Statute that Do Not Reflect a Good Faith Effort to Resolve the Problem

The agencies that I primarily appear before (the ITC and DOC) almost always offer well-reasoned views in their interpretations of the statute. Even when I have occasion to challenge the reasonableness of an ITC or DOC interpretation, I have never faced one as absurd and unreasonable as the one Labor offered in *Former Employees of Merrill Corporation.*

My clients in that case produced financial documents (SEC filings, annual reports, etc.) for many different customers. The firm shifted certain functions (typesetting, proof reading, formatting) to India, and the finished financial document was imported into the United States. After the firm shifted that aspect of production offshore, it laid off the workers who had performed those functions. Following several court ordered remands, and years into the case, Labor found a new and previously

[17] *Former Employees of IBM Corp. v. U.S. Sec'y of Labor,* 483 F. Supp. 2d 1284, 1287 (Ct. Int'l Trade 2007 (quoting Plaintiffs' brief).

[18] *See Former Employees of BMC Software, Inc. v. U.S. Sec'y of Labor,* 454 F. Supp. 2d 1306, 1328–36 (Ct. Int'l Trade 2006).

unarticulated reason for denying TAA to my clients. Labor reasoned that the articles my clients produced were not like or directly competitive with the imported articles.[19]

The ETA took the position that each financial document was unique. For example, an annual report for Microsoft was not like or directly competitive with an annual report for Apple, and even quarterly financial reports were not like or directly competitive with one another because they contained different financial data from different reporting periods. On the basis of this tortured reasoning, Labor argued that the workers who lost their jobs after the shift to India were not eligible because each and every article they produced was unique, and thus did not fall within the meaning of "like or directly competitive" as Labor interpreted the term. Nonsense, as the CIT astutely noted. Nowhere did Congress (or even Labor) restrict TAA eligibility "to workers engaged in mass-production to the exclusion of workers whose output may require skills, training, and expertise necessary to produce custom-made articles."[20] I believe that Labor's reliance on tortured interpretation of the statute to defend a negative decision shows how deep the problems are in the ETA's administration of the statute. Again, this is not a unique instance of Labor engaging in an absurd interpretation of the statute in order to reach Labor's desired result. The CIT chastised Labor in another case as follows: "To put it bluntly, the Labor Department's pinched, formalistic analysis verges on intellectual dishonesty."[21]

5. Labor Does Not Concede that Cases with Similar Facts Should Have Similar Outcomes

Another disturbing trend that adds to the unsuccessful TAA petitioners' plight is the unwillingness of the ETA to acknowledge that similarly situated applicants should receive the same treatment. Labor ignored this basic tenet of law in *Former Employees of Merrill Corporation.* During the course of that multi-year litigation, but in a different case, Labor announced a change in policy that recognized certain products could be considered articles even if the goods were intangible, and workers manufacturing them would thereby qualify for TAA. Labor, however, did not notify the CIT of this change—that burden fell on the workers. Upon learning of this policy change, the CIT ordered Labor to reconsider its decision.[22] Incredibly, Labor again denied certification (as noted above, on the grounds that the articles were unique). But this time, Labor ignored its practice in still a different case in which it had certified workers who produced custom logos, which—by definition—were unique.[23] In other words, Labor twice in the same proceeding failed to accord a similar outcome to similarly situated individuals. Labor's failure in this regard is not unique, as the CIT has expressed a similar concern in three recent cases.

6. Labor Appears to Lack Respect for the CIT's Authority

In the cases in which I have been involved, and in analyzing many CIT decisions, it is evident to me that Labor has little respect for the CIT's authority. Short of holding Labor officials in contempt, there is little the CIT can do to remedy this situation. In my view, this is partly responsible for the untenable situation that exists today, where Labor strives to maintain its original determination without regard to the duty prescribed by Congress to conduct TAA cases with the utmost regard for the workers.

Labor, itself, has argued that the CIT has no authority to order the certification of workers, and that Labor, alone, can do so. For support, Labor cites two statutory provisions. The first states that Labor's factual findings are conclusive if they are supported by substantial evidence.[24] The second states that the CIT may not grant an injunction or issue a writ of mandamus in an appeal of Labor's denial of TAA.[25] Taken together, Labor reads these provisions to mean that there can only be an endless back and forth between the agency and the court until one side surrenders. At no point, in Labor's view, does the CIT have authority to order certification. The consequence of this battle of wills is delay in the final resolution of the case and

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[19] It took several CIT orders just to get Labor to grudgingly accept that my clients produced an article.

[20] *Former Employees of Merrill Corp. v. U.S. Sec'y of Labor,* 483 F. Supp. 2d 1256, 1268 (Ct. Int'l Trade 2007).

[21] *See Former Employees of IBM v. U.S. Sec'y of Labor,* 483 F. Supp. 2d 1284, 1326 (Ct. Int'l Trade 2007).

[22] *See Former Employees of Merrill Corp. v. U.S. Sec'y of Labor,* Slip Op. 06–72, 2006 WL 1491616 (Ct. Int'l Trade May 17, 2006).

[23] *Former Employees of Merrill Corp. v. U.S. Sec'y of Labor,* 483 F. Supp. 2d 1256, 1268–69 (Ct. Int'l Trade 2007).

[24] *See* 19 U.S.C. § 2395(b).

[25] *See* 28 U.S.C. § 2643(c)(2).

issues that already had been settled during a prior segment of the same proceeding often are reargued.[26]

Common sense dictates that Labor's view is incorrect. Congress must have intended for meaningful judicial review and for the courts to have the authority to ensure that their rulings were implemented. This is evident from the fact that Congress created three levels of judicial review of Labor decisions including the CIT, the Court of Appeals for the Federal Circuit, and, ultimately, the Supreme Court.[27] Yet Labor's position is that if Labor decides not to change its decision, not one of the three reviewing courts can do anything about it.

III. THE PROBLEMS WITH LABOR ARE WIDESPREAD

My testimony thus far has focused primarily on my own experience. The following quotes are intended to show the Committee the breadth of the problem. In my experience, some CIT judges direct occasional harsh words towards the government agencies that appear before it. But I am unaware of an agency that has received more uniform criticism from so many different judges. To me, this is further evidence of the severity of the problem with the ETA's investigations.

The following quotations are taken from two opinions by Judge Ridgway in which she catalogued the court's various criticisms of Labor's investigations.

A. *Former Employees of BMC Software, Inc. v. U.S. Sec'y of Labor,* 454 F. Supp. 2d 1306, 1313 N.10 (Ct. Int'l Trade 2006).

- agency's investigation was "merely perfunctory," and petition was denied based on only "scant evidence;" action remanded to agency with instructions to supplement "shockingly thin" record of investigation[28] (Judge Barzilay)
- agency's determination both "betrays . . . [any] understanding of the industry it is investigating and the requirements of the [TAA statute]" and "failed to make reference to relevant law . . ., including Labor's own regulations on the matter;" and, although agency was granted three extensions of time to file results of second remand, remand results nevertheless still failed to comply with court's remand instructions[29] (Judge Pogue)
- "Labor repeatedly disregarded evidence of critical facts," "refused to accept information submitted by [the petitioning workers], which allegedly contradicted statements made by [company] officials," "rel[ied] on incomplete and allegedly contradictory information to support its position," and ultimately "failed to provide any analysis regarding the change in its position to certify [the workers] as eligible"[30] (Judge Carman)
- agency's finding "is not only unsupported by substantial evidence, but is contradicted by the scant evidence" that exists[31] (Judge Eaton)
- because "Labor never acknowledged its receipt of [the workers'] petition and wholly failed to initiate an investigation thereof," "the displaced workers' claims were ignored for over three months;'" once initiated, "[t]he entire investigation consisted of two communications with only one individual, [the company's] HR manager;" and even "the investigation upon [the workers' request for] reconsideration was perfunctory at best"[32] (Chief Judge Restani)
- "the entirety of the Labor Department's initial investigation consisted of forwarding the standard [form questionnaire]" to company official, with no follow-up by the agency, "even though the company's responses . . . were, in a number of instances, ambiguous or inconsistent, and called for clarification;" "Moreover, the agency's investigation conducted in response to the Workers' request for reconsideration was little more than a rubber stamp of its initial Negative Determination," "consist[ing]—in toto—of two phone conversations

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[26] *See Former Employees of Merrill Corp. v. U.S. Sec'y of Labor,* 483 F. Supp. 2d at 1266 n.7 (stating "This Court does not appreciate Labor's attempt to reargue this point in the third remand results.").

[27] *See* 19 U.S.C. § 2395(c).

[28] *Former Employees of IBM Corp., Global Servs. Div. v. U.S. Sec'y of Labor,* 387 F. Supp. 2d 1346, 1350–51, 1353 (Ct. Int'l Trade 2005).

[29] *Former Employees of Murray Engineering, Inc. v. Chao,* 358 F. Supp. 2d 1269, 1274, 1275 n. 10 (Ct. Int'l Trade 2004).

[30] *Former Employees of Tyco Electronics v. U.S. Dep't of Labor,* 350 F. Supp. 2d 1075, 1089 (Ct. Int'l Trade 2004).

[31] *Former Employees of Ericsson, Inc. v. U.S. Sec'y of Labor,* Slip Op. 04–130, 2004 WL 2491651 at *5 (Ct. Int'l Trade Oct. 13, 2004).

[32] *Former Employees of Sun Apparel of Texas v. U.S. Sec'y of Labor,* Slip Op. 04–106, 2004 WL 1875062 at *6–7 (Ct. Int'l Trade Aug. 20, 2004).

with company officials on a single day, which were in turn documented in two memoranda that, together, constituted a mere three sentences"[33] (Judge Ridgway)

B. Former Employees of Ameriphone, Inc. v. U.S., 288 F. Supp. 2d 1353, 1355 N.3 (Ct. Int'l Trade 2003).

- castigating agency for "a sloppy and inadequate investigation" which was "the product of laziness," and holding that a fourth remand would be "futile"[34] (Judge Tsoucalas)
- characterizing agency's actions as "unreasonable" and its investigation as "misguided and inadequate at best" where agency, *inter alia,* failed to clarify important aspects of information provided by company, relied on company's unsubstantiated statements on critical point, and ignored other relevant information[35] (Judge Goldberg)
- "conclud[ing] that Labor . . . conducted an inadequate investigation and analysis of the plaintiffs as 'production' workers" and, similarly, that "Labor's service worker [analysis was] inadequate"[36] (Judge Musgrave)

With so many well-respected jurists of the same mind on this issue, there is no question in my mind that my clients' painful experiences are not unique—they are suffered by all unsuccessful TAA applicants.

IV. COMMON MISUNDERSTANDINGS ABOUT PROBLEMS WITH LABOR'S ADMINISTRATION OF TAA

In discussions that I have had with my colleagues over the years, it occurs to me that there are a number of misunderstandings that attempt to explain (or even justify) the inadequacy of Labor's investigations (both at the agency level and in subsequent litigation). Generally, the misconceptions fall into one of the following three categories: 1) Labor receives inadequate funding for the TAA program, 2) Labor follows the wishes of the company that has laid off the workers, and 3) Labor has the same track record as the other agencies that appear before the CIT. My reason for addressing these misconceptions is that I believe each, in its own way, suggests that some factor, other than sheer unwillingness explains the ETA's action. In my view, there is no valid excuse for the appallingly low quality of Labor's investigations.

A. Inadequate Funding or Lack of Resources Cannot Explain Labor's Stance

There is little question that Labor has limited resources in terms of staff, funds, and even the time it is given to conduct its investigations. At first glance, these would appear as a reasonable basis for excusing Labor's shortcomings. On closer inspection, the above factors cannot explain or justify Labor's failure to investigate TAA cases in the manner Congress intended.

First, Congress has directed Labor to evaluate a worker's eligibility for TAA through an investigation that should consist of gathering all relevant evidence and applying the law to the facts found. Labor, surely, does not have the time or resources to compile the same extensive records as do other agencies such as the ITC and DOC. If Labor needs more than just the handful of investigators that it has, it should ask for them. To my knowledge, Labor has not done so. But even with the resources Labor does have, surely the agency could do far more than sending a few e-mail messages and making a few phone calls, especially in the context of a remand proceeding. Not allowing parties to meaningfully participate in the remand investigation, which would greatly improve the information gathering, also is not a question of resources. As I have previously discussed, Labor's failure to conduct the kind of investigation Congress intended is because the agency has lost sight of the need to hold the interests of the workers in the utmost regard.

Second, Congress did not intend for funding concerns to drive Labor's determinations on TAA eligibility. Instead, Congress spelled out the conditions for eligibility and specified that if those conditions were satisfied, Labor was to certify the work-

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[33] *Former Employees of Ameriphone, Inc. v. U.S.,* 288 F. Supp. 2d 1353, 1358–59 (Ct. Int'l Trade 2003).

[34] *Former Employees of Hawkins Oil and Gas, Inc. v. U.S. Sec'y of Labor,* 814 F. Supp. 1111, 1115 (Ct. Int'l Trade 1993).

[35] *Former Employees of Swiss Indus. Abrasives v. U.S.,* 830 F. Supp. 637, 641–42 (Ct. Int'l Trade 1993).

[36] *Former Employees of Pittsburgh Logistics Sys., Inc. v. U.S. Sec'y of Labor,* SLIP OP. 03–111, 2003 WL 22020510 at *11 (Ct. Int'l Trade 2003).

ers for TAA. To the extent Labor is making determinations on eligibility based on funding concerns, it is at complete odds with Congressional will.

Third, my view is that Labor's overall approach to the unsuccessful TAA applicant demonstrates a lack of concern for the workers—not a lack of resources. Last minute requests for extensions of time, absurd interpretations of the statute, and a general unwillingness to accept the CIT's authority cannot be explained by resource constraints. In fact, by not following the statute and the CIT's instructions in good faith, Labor creates more work for itself—not less.

B. Labor Follows the Will of the Company that Laid Off the Workers

The CIT has expressed concern that Labor unquestioningly relies on employer-provided information to the exclusion of that provided by employees or other sources.[37] In particular, the CIT was concerned that some companies might want to avoid the negative publicity that might be associated with laying off workers for trade-related reasons.[38] As a result, such companies might have an incentive to see the petition fail, and would provide information to influence the decision in that direction. Consequently, if those circumstances were present and Labor accepted the information provided by company officials in the face of contradictory information provided by the employees, Labor clearly would not be fulfilling its responsibilities.

While I do not doubt that the court's concerns were justified in the case before it and are present in others, my concern is that Labor seizes on whatever information supports its decision not to certify—irrespective of the source. In the cases I have litigated, Labor ignored information provided by company officials, which if taken at face value, should have resulted in a certification of the workers for TAA. In one case, the company's human resources department was even responsible for filing the petition with Labor. A review of the cases filed at the CIT since 2005 shows that the company filed the TAA petition with Labor in at least six instances. So I do not believe that Labor tends to take the position favored by the firm laying off the workers. Rather, Labor relies on information that supports its decision not to certify.

C. Labor Has the Same Track Record as Other Agencies that Appear Before the CIT

A number of agencies who enforce and administer the U.S. customs and trade laws are frequent litigants at the CIT. While I have not performed an objective assessment to compare the agencies' track records, I am able to offer my views based on the cases in which I have participated. In most trade and customs cases, the dispute between the private parties and the government agencies focuses on several discrete issues. Rarely (in my own experience, never) are challenges made to the overall adequacy of the investigation, and rarely does an agency ask for a voluntary remand, thereby conceding a flawed investigation. Even when Labor does not seek a voluntary remand, the record is so poorly developed that there is little to do but ask the CIT to remand to the agency.

The large number of remands in TAA cases also makes Labor stand out from the other agencies administering the customs and trade laws. In my experience, and in all but the most unusual cases, if an ITC or DOC determination is not upheld by the CIT without remand proceedings it often is upheld after the remand proceedings. But in a TAA case, one must expect that multiple remands are going to be necessary just to settle the basic facts, which the CIT has described as the "ping pong phenomenon."

Finally, there is no question that the CIT has expressed concern with agencies besides Labor. But if one looks earlier in my testimony at the excerpts from the opinions of a wide range of judges that contain scathing criticisms of the ETA, it is clear that Labor is in a class by itself.

V. SOLVING THE PROBLEMS FACED BY UNSUCCESSFUL TAA PETITIONERS

In my view, fixing the existing system will require one significant non-statutory change and several statutory ones. Sadly, the biggest obstacle to unsuccessful TAA petitioners is the Employment and Training Administration of the Department of Labor. Possibly no other change could have as beneficial an effect as holding the ETA responsible for conducting a meaningful investigation. The CIT has been trying to do this, yet the problem persists. As I mentioned earlier in my testimony, for TAA

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[37] *See Former Employees of BMC Software, Inc. v. Sec'y of Labor,* 454 F. Supp. 2d 1306, 1328–37 (Ct. Int'l Trade 2006).

[38] *See Former Employees of BMC Software, Inc. v. Sec'y of Labor,* 454 F. Supp. 2d 1333 (Ct. Int'l Trade 2006).

to be effective, Labor has to get it right the first time. Once the court steps in to force Labor to do a proper investigation it already is too late. By that time, most workers will have suffered the brunt of the adverse economic consequences associated with the job loss. While I can diagnose the problem, I cannot prescribe an exact cure for a problem that is deeply entrenched and long standing. I do think it will require active involvement by the legislature because in my view, the problem has persisted irrespective of which political party occupies the White House. In other words, I do not believe that a new occupant in the White House, irrespective of party, is going to solve the problem without active pressure from the legislative branch.

In terms of legislative changes, I believe the following statutory amendments would improve unsuccessful TAA petitioners' chances of obtaining meaningful relief: 1) mandatory and swift time frames for judicial resolution of TAA cases, 2) mandatory changes to the manner in which the ETA conducts its investigations, and 3) clarifying that the CIT has the authority to order Labor to certify workers for TAA.

Although it is not common for Congress to impose mandatory time frames on Article III courts, it is not without precedent. Congress has established express and speedy time frames under which the courts must act in laws ranging from the *Crime Victims' Rights Act* and the *Antiterrorism and Effective Death Penalty Act* to procedures dealing with the disclosure of classified information.[39] I do not mean to convey the impression that TAA cases rise to the level of severity present in these other situations, but Congress created the program because it felt these individuals needed help, and if lengthy judicial proceedings are preventing that intent from being realized, Congress can impose time limits if it so chooses.

Another improvement for unsuccessful TAA petitioners would be to require Labor to change the manner in which it conducts its investigations. As I have indicated throughout my testimony, I do not believe that the manner in which the ETA currently conducts investigations is consistent with what Congress intended. Two modifications would go a long way towards improving the quality of the investigation the ETA conducts. First, counsel for the workers should have the right to participate and ask questions in any fact-finding missions by Labor, whether conducted telephonically or otherwise. Second, Labor must provide counsel for the workers with the information it obtains on the day it receives the information, or shortly thereafter. These two changes are needed to ensure that the workers, through counsel, have a meaningful opportunity to participate in the remand proceedings.

Finally, Congress needs to clarify the statute to protect the CIT's authority. As I noted earlier, Labor construes 19 U.S.C. § 2395(b) and 28 U.S.C. § 2643(c)(2) to preclude the CIT from having the authority to order Labor to certify workers for TAA. As a consequence, litigations drags on endlessly, and getting to a final resolution becomes a war of wills. This cannot be what Congress intended when it enacted these provisions, and a clear statement to that effect is needed to end this absurd impasse.

Thank you, Mr. Chairman and Members of the Committee, for affording me the honor of voicing these concerns on behalf of the countless hardworking men and women of America who have been failed by the very agency that Congress designated to protect their interests.

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[39] *See* 18 U.S.C. 3771(d)(3); 18 U.S.C. 2339B(f)(5)(B); 28 U.S.C. § 2261 et seq.

Westlaw.
454 F.Supp.2d 1306
454 F.Supp.2d 1306, 28 ITRD 2159
(Cite as: 454 F.Supp.2d 1306)

HFormer Employees of BMC Software, Inc. v. U.S. Secretary of Labor
CIT,2006.

United States Court ofInternational Trade.
FORMER EMPLOYEES OF BMC SOFTWARE, INC., Plaintiffs,
v.
UNITED STATES SECRETARY OF LABOR, Defendant.
Slip Op. 06-132.
Court No. 04-00229.

Aug. 31, 2006.

Background: Laid-off employees of software vendor filed suit contesting the initial determination of the Department of Labor denying their petition for certification of eligibility for trade adjustment assistance (TAA) benefits.

Holding: After Labor Department's filing of notice of revised determination on remand, the Court of International Trade, Ridgway, J., held that methodology employed by Department of Labor in conducting initial investigation of TAA petition was improper.

Judgment in accordance with opinion.

West Headnotes

[1] Customs Duties 114 ⚿22.5

114 Customs Duties
1141 Validity, Construction, and Operation of Customs Laws in General
114k22.5 k. Relief from Injury Caused by Import Competition. Most Cited Cases
Trade adjustment assistance laws are generally designed to assist workers who have lost their jobs as a result of increased import competition from-or shifts in production to-other countries, by helping those workers 'learn the new skills necessary to find productive employment in a changing American economy'. Trade Act of 1974, § 222 et seq., 19 U.S.C.A. § 2272 et seq.

[2] Customs Duties 114 ⚿22.5

114 Customs Duties
1141 Validity, Construction, and Operation of Customs Laws in General
114k22.5 k. Relief from Injury Caused by Import Competition. Most Cited Cases
Trade adjustment assistance laws are remedial legislation and, as such, are to be construed broadly to effectuate their intended purpose. Trade Act of 1974, § 222 et seq., 19 U.S.C.A. § 2272 et seq.

[3] Customs Duties 114 ⚿22.5

114 Customs Duties
1141 Validity, Construction, and Operation of Customs Laws in General
114k22.5 k. Relief from Injury Caused by Import Competition. Most Cited Cases
Because of the ex parte nature of the certification process, and the remedial purpose of trade adjustment assistance (TAA) program,' the Labor Department is obligated to conduct its investigation with the utmost regard for the interest of the petitioning workers. Trade Act of 1974, § 222 et seq., 19 U.S.C.A. § 2272 et seq.

[4] Customs Duties 114 ⚿22.5

114 Customs Duties
1141 Validity, Construction, and Operation of Customs Laws in General
114k22.5 k. Relief from Injury Caused by Import Competition. Most Cited Cases
Methodology employed by Department of Labor in conducting initial investigation of trade adjustment assistance (TAA) benefits petition was improper; Department failed even to acknowledge, much less seek to resolve, apparent inconsistencies between information provided by the workers in their TAA petition and that supplied by their former employer, agency's investigation conducted in response to the workers' request for reconsideration was little more than a rubber-stamp of its initial denial, and there was no apparent rational basis for treating information supplied by employer as inherently and necessarily

more reliable and authoritative than that provided by petitioning workers, particularly since the employer's information was unsworn, unverified, and uncorroborated, and conflicted with information submitted by the petitioning workers. Trade Act of 1974, § 222 et seq., 19 U.S.C.A. § 2272 et seq.

[5] Administrative Law and Procedure 15A ⚷817.1

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(F) Determination
15Ak817 Remand
15Ak817.1 k. In General. Most Cited Cases
Where an agency requests a remand without confessing error in order to reconsider its previous position, reviewing court has discretion over whether to remand.

[6] Customs Duties 114 ⚷84(2)

114 Customs Duties
114VII Protests and Review
114k84 Court of International Trade (Formerly Customs Court) and Proceedings Therein
114k84(2) k. Proceedings in General. Most Cited Cases
To the extent that the time consumed by litigation may operate in any fashion to limit the effectiveness of any relief that may ultimately be awarded in a trade adjustment assistance (TAA) case, Court of International Trade is duty-bound, particularly in light of the remedial nature of the TAA statute, to expedite its proceedings, limiting the number and the duration of remands, and otherwise keeping the parties on a short leash. Trade Act of 1974, § 222 et seq., 19 U.S.C.A. § 2272 et seq.

***1307** Miller & Chevalier Chartered, (Alexander D. Chinoy, Hal S. Shapiro, Myles S. Getlan, Daniel Lewis, and Owen Bonheimer), for Plaintiffs.
Peter D. Keisler, Assistant Attorney General; David M. Cohen, Director, Jeanne E. Davidson, Deputy Director, and Patricia M. McCarthy, Assistant Director, Commercial Litigation Branch, Civil Division, U.S. Department of Justice (Michael D. Panzera); Charles D. Raymond, Associate Solicitor for Employment and Training Legal Services, Office of the Solicitor, U.S. Department of Labor (Stephen R. Jones), Of Counsel; for Defendant.

OPINION

RIDGWAY, Judge.
In this action, former employees of Houston, Texas-based BMC Software, Inc. ("the Workers") contest the determination of the U.S. Department of Labor denying their petition for certification of eligibility for trade adjustment assistance ("TAA") benefits. *See* Letter to Court from A. Blummer, dated June 1, 2004 ("Complaint"); 69 Fed.Reg. 6694, 6695 (Feb. 11, 2004) (notice of receipt of petition and initiation of investigation); 69 Fed.Reg. 11,887, 11,888 (March 12, 2004) (notice of denial of petition); 69 Fed.Reg. 20,642 (April 16, 2004) (notice of denial of request for reconsideration); A.R. 2-33, 44-45, 53, 56-59.[FN1] Jurisdiction lies under 28 U.S.C. § 1581(d)(1) (2000).[FN2]

FN1. The administrative record in this case consists of two parts-the initial Administrative Record (which the Labor Department filed with the court after this action was commenced), and the Supplemental Administrative Record (which was filed after the Labor Department's post-remand certification of the Workers).

The two parts of the administrative record are separately paginated; both parts include confidential business information. Citations to the public record are noted as "A.R.---" and "S.A.R.---," as appropriate, while citations to the confidential record are noted as "C.A.R.---" and "C.S.A.R.---."

FN2. Except as otherwise indicated, all statutory citations are to the 2000 version of the United States Code.

Now pending before the Court is the Labor Department's Notice of Revised Determination on Remand ("Revised Remand Determination"), which certifies that:

All workers of BMC Software, Inc., Houston, Texas, who became totally or partially separated from

employment on or after December 23, 2002, through two years from the issuance of this revised determination, are eligible to apply for Trade Adjustment Assistance under section 223 of the Trade Act of 1974.

69 Fed.Reg. 76,783, 76,784 (Dec. 22, 2004). The Workers have advised that they are satisfied with that certification, albeit with certain reservations.

Accordingly, with the observations and clarifications set forth below, the Labor Department's Revised Remand Determination is sustained.

I. *Background*

A. *The Trade Adjustment Assistance Laws*

Trade adjustment assistance ("TAA") programs historically have been-and today continue to be-touted as the *quid pro quo* for U.S. national policies of free trade. *See generally* ***1308***Former Employees of Chevron Prods. Co. v. U.S. Sec'y of Labor*, 27 CIT ----, ----, 298 F.Supp.2d 1338, 1349-50 (2003) ("*Chevron III*") (summarizing policy underpinnings of trade adjustment assistance laws).[FN3]

FN3. *See also* Erika Kinetz, "Trading Down: The U.S. Shortchanges Its Outsourced Workers,"*Harper's Magazine*, July 2005, at 62 ("*Harper's Magazine*") ("For more than forty years, [TAA's] real success has been as a political tool: it has kept America from the precipice of protectionism and helped to preserve the root of the very injustice it was meant to heal.... For many Republicans, economists, and corporate executives, [the cost of the TAA program] is a small price to pay for keeping free trade politically feasible."), 63 (in its inception, TAA "served a prominent political function: it was created in order to win AFL-CIO support for the Trade Expansion Act of 1962, which led to broad tariff reductions."); Lori G. Kletzer and Howard Rosen, "Easing the Adjustment Burden on U.S. Workers," in *The United States and the World Economy: Foreign Economic Policy for the Next Decade* 316-20 (2005) ("Kletzer & Rosen") (noting, *inter alia*, that programs for assistance to displaced workers have been motivated in part by "social and political factors," that Congress has used granting of trade negotiating authority as an "opportunity to compensate U.S. workers potentially adversely affected by any resulting changes in foreign competition," that the U.S. Trade Representative "has long supported TAA as a means for winning congressional support for trade negotiating authority," that expansions of TAA programs historically "have been highly correlated with congressional consideration of trade-liberalizing legislation," that TAA has been considered "as a *quid pro quo* for support on trade-liberalizing legislation," and that the inclusion of TAA reform measures in the Trade Act of 2002-which renewed the President's trade promotion authority (an early, high priority of the then-new Administration)-"helped secure the votes necessary to pass the Trade Act"); Mike Dorning, "Trade Assistance Programs Fall Short," *Chicago Tribune*, Oct. 8, 2005 (*"Chicago Tribune"*) ("During the election campaign and again this summer as the Bush administration fought for a free trade agreement with Caribbean countries, the White House regularly extolled its efforts [*i.e.*, the availability of TAA] on behalf of American workers who lose their jobs to foreign competition.").

> Although TAA was originally "created in order to win AFL-CIO support" for free trade legislation, the program no longer enjoys the broad support of organized labor. A recent analysis in *Harper's Magazine* explained:
>
> TAA has always been a political *quid pro quo*-a little TAA for a lot of trade-that has worked to keep markets open.
>
> But as job growth remains weak and the U.S. current-account deficit continues to swell, this trade-off looks increasingly unfavorable to unionized labor, which has long decried TAA as "burial insurance."
>
> *Harper's Magazine* at 63-64. *See also, e.g.*, Kletzer & Rosen at 317-18 (Unions

"have always feared that supporting TAA could be seen as weakening their position against trade liberalization. TAA's link to job loss and the modest amount of assistance have led unions to characterize TAA as 'burial insurance' "); Megan Barnett, "Starting Over," *U.S. News & World Report,* May 31, 2004, at 49 ("TAA is a program with little political support. Because retraining displaced workers is an integral part of trade policy, antitrade constituents like unions don't actively advocate it.").

As *UAW v. Marshall* explains, "much as the doctrine of eminent domain requires compensation when private property is taken for public use," the trade adjustment assistance laws similarly reflect the country's recognition "that fairness demand[s] some mechanism whereby the national public, which realizes an overall gain through trade readjustments, can compensate the particular ... workers who suffer a[job] loss." *UAW v. Marshall,* 584 F.2d 390, 395 (D.C.Cir.1978).[FN4]

FN4.*See* Brad Brooks-Rubin, "The Certification Process for Trade Adjustment Assistance: Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. 797, 798 n. 10 (2005) ("Certifiably Broken") (and sources cited there) ("The basic economic policy premise for TAA is to ease the costs borne by certain workers as a result of trade liberalization. While trade liberalization provides significant opportunities for many sectors of the American economy, inevitably certain sectors suffer. TAA and other adjustment initiatives were created as a means to assist those bearing the burden of freer trade."); *Chicago Tribune* ("Although most economists believe that the nation as a whole benefits from freer trade, as consumers gain access to cheaper imports and exporters gain larger markets, the costs are high for workers who lose their jobs in the process. Partly to lighten the burden on those put out of work for the greater good and partly to counter union opposition to free trade deals, Congress has provided for some type of assistance to workers dislocated by foreign trade since the 1960s.").

***1309** In short, absent TAA programs that are adequately funded and conscientiously administered, "the costs of a federal policy [of free trade] that confer[s] benefits on the nation as a whole would be imposed on a minority of American workers" who lose their jobs due to increased imports and shifts of production abroad. *Id. See also Former Employees of Bell Helicopter Textron v. United States,* 18 CIT 323, 328-29 (1994) (summarizing policy underpinnings and legislative history of TAA). Thus, as a recent article in *Harper's Magazine* explained, "[w]hen he introduced TAA, President Kennedy justified the program in moral terms":

"Those injured by [trade] competition should not be required to bear the full brunt of the impact. Rather, the burden of economic adjustment should be borne in part by the federal government ... [T]here is an obligation to render assistance to those who suffer as a result of national trade policy."

Harper's Magazine at 63 (*quoting* Kennedy).

[1] The trade adjustment assistance laws are generally designed to assist workers who have lost their jobs as a result of increased import competition from-or shifts in production to-other countries, by helping those workers "learn the new skills necessary to find productive employment in a changing American economy." *Former Employees of Chevron Prods. Co. v. U.S. Sec'y of Labor,* 26 CIT 1272, 1273, 245 F.Supp.2d 1312, 1317 (2002) ("*Chevron I*") (*quoting*S.Rep. No. 100-71, at 11 (1987)). As expanded in 2002,[FN5] today's TAA program***1310** entitles eligible workers [FN6] to receive benefits which may include employment services (such as career counseling, resume-writing and interview skills workshops, and job referral programs), vocational training, job search and relocation allowances, income support payments (known as "Trade Readjustment Allowance" or "TRA" payments), and a Health Insurance Coverage Tax Credit. *See generally*19 U.S.C. § 2272*et seq.* (2000 & Supp. II 2002).[FN7] Since 1974, the Labor ***1311** Department has been entrusted with the administration of the trade adjustment assistance program.[FN8]

FN5. The TAA program was initially established by Congress and the Kennedy

Administration under the Trade Expansion Act of 1962 (Pub.L.87-794), to provide assistance to workers who lost their jobs due to increased import competition. The program was substantially modified by the Trade Act of 1974 (Pub.L.93-618), and-*inter alia*-eligibility requirements were relaxed to some degree. In 1981, assistance was reduced-*e.g.*, income support was reduced from the average manufacturing wage to the prevailing unemployment insurance rate, and made conditional on enrollment in training in certain circumstances (a requirement which was further tightened in 1988). Then, in 1993, Congress enacted the North American Free Trade Agreement Implementation Act (Pub.L.103-182), creating a separate NAFTA-TAA program specifically targeting workers displaced as a result of trade with Canada and Mexico. *See generally* GAO-04-1012, "Trade Adjustment Assistance: Reforms Have Accelerated Training Enrollment, but Implementation Challenges Remain," Sept. 2004, at 6 ("GAO Report 04-1012"); GAO-01-838, "Trade Adjustment Assistance: Experiences of Six Trade-Impacted Communities," Aug. 2001, at 5 ("GAO Report 01-838"); Kletzer & Rosen at 316-18; *Harper's Magazine* at 63; "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 802 & n. 25;*United Shoe Workers of America, AFL-CIO v. Bedell*, 506 F.2d 174, 181-82 (D.C.Cir.1973) (tracing legislative history of Trade Expansion Act of 1962); *Fortin v. Marshall*, 608 F.2d 525, 528 (1st Cir.1979) (summarizing history of 1974 Act, in light of 1962 legislation).

However, the TAA Reform Act of 2002 (part of the Trade Act of 2002) effected what are-by any measure-the most sweeping reforms of trade adjustment assistance since its inception in 1962. *See*Pub.L. 107-210, 116 Stat. 933 (2002). Among other things, the TAA Reform Act consolidated the TAA and NAFTA-TAA programs into a single TAA program, reduced the time for a Labor Department determination on a petition to 40 days, increased the maximum number of weeks of TRA payments available (to match the maximum number of weeks of training available), added new benefits (including the Health Coverage Tax Credit), and expanded eligibility to include additional secondary workers and additional workers affected by shifts in production (beyond those affected by trade with Canada and Mexico, some of whom were eligible for NAFTA-TAA benefits). *See generally* GAO Report 04-1012 at 7-11 (including Table 1, "Major Changes in the TAA Reform Act of 2002," a side-by-side comparison of the existing TAA program with the provisions of the predecessor TAA and NAFTA-TAA programs); Kletzer & Rosen at 319-21; *Harper's Magazine* at 63; "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 802.

In addition, the TAA Reform Act of 2002 established as a demonstration project a wage insurance benefit for older workers, known as the Alternative Trade Adjustment Assistance ("ATAA") program. ATAA allows workers aged 50 or older, for whom retraining may not be appropriate, to accept reemployment at a lower wage and receive a wage subsidy. Workers who qualify for ATAA are eligible to receive 50% of the difference between their new and old wages, up to a maximum of $10,000 over two years. *See generally* GAO Report 04-1012 at 2, 10. Older trade affected workers are eligible for ATAA only if the TAA petition filed with the Labor Department specifically requested ATAA certification. *Id.* The petition at issue here did not.

FN6. For a table succinctly summarizing "TAA Eligibility Requirements," *see* GAO Report 04-1012 at 12 (Table 2).

The criteria for TAA certification as "production workers" are codified at 19 U.S.C. § 2272:

(a) In general

A group of workers ... shall be certified ... as eligible to apply for adjustment

assistance ... if the Secretary determines that-

(1) a significant number or proportion of the workers in such workers' firm, or an appropriate subdivision of the firm, have become ... separated ...; and

(2) (A)(i) the sales or production, or both, of such firm or subdivision have decreased absolutely;

(ii) imports of articles like or directly competitive with articles produced by such firm or subdivision have increased; and

(iii) the increase in imports described in clause (ii) contributed importantly to such workers' separation or threat of separation and to the decline in the sales or production of such firm or subdivision; or

(B) (i) there has been a shift in production by such workers' firm or subdivision to a foreign country of articles like or directly competitive with articles which are produced by such firm or subdivision; and

(ii) (I) the country to which the workers' firm has shifted production of the articles is a party to a free trade agreement with the United States;

(II) the country to which the workers' firm has shifted production of the articles is a beneficiary country under the Andean Trade Preference Act ..., African Growth and Opportunity Act ..., or the Caribbean Basin Economic Recovery Act ...; or

(III) there has been or is likely to be an increase in imports of articles that are like or directly competitive with articles which are or were produced by such firm or subdivision.

19 U.S.C. § 2272 (Supp. II 2002).

Trade-affected workers who are not eligible for certification as "production workers" under 19 U.S.C. § 2272(a) may be eligible for certification as "secondary workers" if they produced component parts for another production firm that has experienced TAA-certified layoffs, or if they performed final assembly or finishing work for such a firm. *See*19 U.S.C. § 2272(b) (Supp. II 2002). Alternatively, displaced workers may be eligible for certification as "service workers." *See* n. 15, *infra* (discussing criteria for certification as "service workers"); *Abbott v. Donovan,* 6 CIT 92, 100-01, 570 F.Supp. 41, 49 (1983) (discussing early history of TAA coverage for "service workers").

FN7. The TAA Reform Act of 2002 established for the first time a trade adjustment assistance program targeting farmers and fishermen, commonly known as "Agricultural TAA." *See generally*19 U.S.C. § 2401*et seq.* (Supp. II 2002). That program is administered not by the Labor Department, but by the U.S. Department of Agriculture.

FN8. For the first 12 years of the program's existence, the International Trade Commission ("ITC") was charged with administering trade adjustment assistance. Congress transferred that responsibility to the Labor Department in 1974, concerned that relatively few workers had been certified as eligible for benefits by the ITC, and that "the program ... often functioned in such a manner that its objectives were frustrated." *See generally* Patricia M. McCarthy, "Origins of Judicial Review of Trade Adjustment Assistance Determinations,"*Litigating Trade Adjustment Assistance Cases Before the United States Court of International Trade,* Customs & International Trade Bar Association and American Bar Association seminar, Princeton Club, New York, NY, April 19, 2005, at 2-4 ("McCarthy") (tracing the history of TAA program) (citations omitted); *UAW v. Marshall,* 584 F.2d at 395 (explaining that "[a] primary purpose of the

Trade Act of 1974 was to make worker adjustment assistance more readily available than it had been under the Trade Expansion Act of 1962," and that "[f]or the first seven years of the earlier [TAA] program, no workers were found eligible for the program's benefits.") (footnotes omitted); *Fortin v. Marshall*, 608 F.2d at 528 & n. 3 (noting that, due to determination by Congress that original TAA program had been "ineffective," 1974 legislation established new program and transferred administration to Labor Department); *Woodrum v. Donovan*, 4 CIT 46, 49-51 & n. 1, 544 F.Supp. 202, 204-05 & n. 1 (1982) (discussing Labor Department's assumption of ITC's duties *vis-a-vis* TAA program; also noting that jurisdiction over review of agency TAA determinations was transferred from U.S. Courts of Appeals to U.S. Court of International Trade as of November 1, 1980).

> Although the Labor Department's portfolio has now included TAA for more than three decades, some commentators have criticized the agency for treating the program as a "stepchild." *See, e.g.*, Kletzer & Rosen at 318 (reporting that the Labor Department "has only reluctantly administered the program and has never promoted expansion or reform"); "Analysis & Perspective: Trade Court's Critique of Labor Department Places Spotlight on Handling of TAA Claims," BNA Int'l Trade Reporter, May 6, 2004, at 797 ("Analysis and Perspective") (*quoting*"former Democratic Senate aide on trade issues" who described TAA as an "orphan program," stating that "[t]he Labor Department has big policy intentions with TAA but [the agency's] implementation has been inconsistent and weak.").
>
> One analysis attributes the Labor Department's ambivalence at least in part to the fact that "TAA requires higher levels of energy and resources to administer than other dislocated-worker programs ..., due to its petition and eligibility process and its wider range of assistance services. From a purely administrative perspective, the [Labor Department] would prefer to administer a single program for all workers regardless of the cause of dislocation." Kletzer & Rosen at 318.

[2] The trade adjustment assistance laws are remedial legislation and, as such, are to be construed broadly to effectuate their intended purpose. *UAW v. Marshall*, 584 F.2d at 396 (noting the "general remedial purpose" of TAA statute, and that "remedial statutes are to be liberally construed"). *See also Fortin v. Marshall*, 608 F.2d at 526, 529 (same); *Usery v. Whitin Machine Works, Inc.*, 554 F.2d 498, 500, 502 (1st Cir.1977) (emphasizing "remedial" purpose of TAA statute).[FN9]

> FN9.*See also Former Employees of Computer Sciences Corp. v. U.S. Sec'y of Labor*, 30 CIT ----, ----, 414 F.Supp.2d 1334, 1343 (2006); *Former Employees of International Business Machines Corp.*, 29 CIT ----, ---- & n. 3, 403 F.Supp.2d 1311, 1314 & n. 3 (2005) (citations omitted) ("*IBM*"); *Former Employees of Merrill Corp. v. United States*, 29 CIT ----, ----, 387 F.Supp.2d 1336, 1342 (2005) ("*Merrill Corp. II*"); *Former Employees of Electronic Data Sys. Corp. v. U.S. Sec'y of Labor*, 28 CIT ----, ----, 350 F.Supp.2d 1282, 1290 (2004) ("*EDS I*"); *Former Employees of Ameriphone, Inc. v. United States*, 27 CIT ----, ----, 288 F.Supp.2d 1353, 1355 (2003) (citations omitted); *Former Employees of Champion Aviation Prods. v. Herman*, 23 CIT 349, 352, 1999 WL 397970 (1999) ("*Champion Aviation I*") (citations omitted) (NAFTA-TAA statute is remedial legislation, to be construed broadly); *Cheyron I*, 26 CIT at 1274, 245 F.Supp.2d at 1318 (citations omitted) (same).

***1312**[3] Moreover, both "[b]ecause of the *ex parte* nature of the certification process, and the *remedial purpose* of the [TAA] program," the Labor Department is obligated to "conduct [its] investigation with *the utmost regard* for the interest of the petitioning workers." *Local 167, Int'l Molders and Allied Workers' Union, AFL-CIO v. Marshall*,

643 F.2d 26, 31 (D.C.Cir.1981) (emphases added). *See also Stidham v. U.S. Dep't of Labor,* 11 CIT 548, 551, 669 F.Supp. 432, 435 (1987) (*citing Abbott v. Donovan,* 7 CIT 323, 327-28, 588 F.Supp. 1438, 1442 (1984) (quotations omitted)); *IBM,* 29 CIT at ----, 403 F.Supp.2d at 1314 (*quoting Stidham*); *Former Employees of Computer Sciences Corp. v. U.S. Sec'y of Labor,* 29 CIT ----, ----, 366 F.Supp.2d 1365, 1371 (2005)

Thus, while the Labor Department is vested with considerable discretion in the conduct of its investigation of trade adjustment assistance claims, "there exists a threshold requirement of reasonable inquiry." *Former Employees of Hawkins Oil & Gas, Inc. v. U.S. Sec'y of Labor,* 17 CIT 126, 130, 814 F.Supp. 1111, 1115 (1993) ("*Hawkins Oil & Gas II*"); *Former Employees of Electronic Data Sys. Corp. v. U.S. Sec'y of Labor,* 29 CIT ----, ----, 408 F.Supp.2d 1338, 1342-43 (2005); *Merrill Corp. II,* 29 CIT at ----, 387 F.Supp.2d at 1345. Courts have not hesitated to set aside agency determinations which are the product of perfunctory investigations.[FN10]*See generally* section II.E, ***1313***infra* (summarizing statistics concerning TAA actions filed with Court of International Trade in recent years, and noting that-at least during four year period analyzed-Labor Department never successfully defended a denial without at least one remand).

FN10.*See, e.g., Ameriphone,* 27 CIT at ---- n. 3, 288 F.Supp.2d at 1355 n. 3 (cataloguing numerous opinions criticizing Labor Department's handling of TAA cases).

See also Former Employees of IBM Corp., Global Services Division v. U.S. Sec'y of Labor, 29 CIT ----, ----, ----, 387 F.Supp.2d 1346, 1350-51, 1353 (2005) ("*IBM I*") (agency's investigation was "merely perfunctory," and petition was denied based on only "scant evidence"; action remanded to agency with instructions to supplement "shockingly thin" record of investigation); *Former Employees of Murray Engineering, Inc. v. Chao,* 28 CIT ----, ----, ---- n. 10, 358 F.Supp.2d 1269, 1274, 1275 n. 10 (2004) ("*Murray Engineering II*") (agency's determination both "betrays ... [any] understanding of the industry it is investigating and the requirements of the [TAA statute]" and "failed to make reference to relevant law ..., including Labor's own regulations on the matter"; and, although agency was granted three extensions of time to file results of second remand, remand results nevertheless still failed to comply with court's remand instructions); *EDS I,* 28 CIT at ----, 350 F.Supp.2d at 1290 (in addition to grave flaws in agency's factual investigation, agency's interchangeable use of distinctly different terms renders its conclusion "hardly discernible" and "neither persuasive nor careful"); *Former Employees of Tyco Electronics v. U.S. Dep't of Labor,* 28 CIT ----, ----, 350 F.Supp.2d 1075, 1089 (2004) ("*Tyco IV*") ("Labor repeatedly disregarded evidence of critical facts,"'refused to accept information submitted by [the petitioning workers], which allegedly contradicted statements made by [company] officials,'"'rel[ied] on incomplete and allegedly contradictory information to support its position," and ultimately "failed to provide any analysis regarding the change in its position to certify [the workers] as eligible"); *Former Employees of Ericsson, Inc. v. U.S. Sec'y of Labor,* 28 CIT ----, ----, 2004 WL 2491651 at * 5 (2004) ("*Ericsson I*") (agency's finding "is not only unsupported by substantial evidence, but is ... contradicted by the scant evidence" that exists); *Former Employees of Sun Apparel of Texas v. U.S. Sec'y of Labor,* 28 CIT ----, ----, 2004 WL 1875062 at **6-7 (2004) ("*Sun Apparel I*") (because "Labor never acknowledged its receipt of [the workers'] petition and wholly failed to initiate an investigation thereof," "the displaced workers' claims were ignored for over three months"; once initiated, "[t]he entire investigation consisted of two communications with only one individual, [the company's] HR manager"; and even "the investigation upon [the workers' request for] reconsideration was perfunctory at best"); *Chevron III,* 27 CIT at ----, 298 F.Supp.2d at 1348-49

("[w]hether as a result of overwork, incompetence, or indifference (or some combination of the three), the Labor Department-for almost four years-deprived the [w]orkers ... of the job training and other benefits to which they are entitled"); *Ameriphone*, 27 CIT at ---, 288 F.Supp.2d at 1358-59 ("the entirety of the Labor Department's initial investigation consisted of forwarding the standard [form questionnaire]" to company official, with no follow-up by the agency, "even though the company's responses ... were, in a number of instances, ambiguous or inconsistent, and called for clarification"; "Moreover, the agency's investigation conducted in response to the Workers' request for reconsideration was little more than a rubber-stamp of its initial Negative Determination,""consist[ing]-in toto-of two phone conversations with company officials on a single day, which were in turn documented in two memoranda that, together, constituted a mere three sentences").

B. *The Facts of This Case*

The Workers' former employer, BMC, is a "Fortune 1000" company, and one of the largest software vendors in the world. Among other things, BMC designs, develops, produces and sells business systems management software, which is distributed both in "object code" form and on a "shrink-wrap" basis. BMC's competitors include industry giants and household names such as IBM, Computer Associates, Microsoft, Sun Microsystems, and Hewlett Packard. S.A.R. 33-36, 52-61; C.S.A.R. 153; *see also* C.S.A.R. 488, 490-91, 492, 493 (relevant portions of Form 10-K for BMC (for FY ended March 31, 2003)) ("BMC Form 10-K").

The four former employees who filed the TAA petition at issue here were involved in the production and distribution of BMC software products. Those products were mass-replicated at the Houston facility where they worked (as well as at several other BMC facilities), and were often shipped on physical media including CD-ROMs, packaged with user manuals. *See* Complaint (including attached photos); A.R. 53; S.A.R. 33-36, 52-61; C.S.A.R. 135, 149, 155, 157, 453, 711.

The Workers' employment at BMC was terminated in early August 2003, as part of a round of lay-offs in response to the company's lackluster performance in the first quarter of its 2004 fiscal year. Those lay-offs were reported in an article published in the *Houston Chronicle:*

BMC Software ... reported a first-quarter loss and said it will slash about 900 jobs worldwide to return to profitability.

The cuts come amid a weak spending environment for technology and amount to about 13 percent of the Houston-based company's work force of 6,825.

The maker of software for managing and monitoring large computer networks would not say how many of its 1,800 workers in Houston would be affected by the reductions, but it is closing facilities and consolidating offices across the globe in an effort to shave $25 million to $30 million off expenses by the fourth quarter.

The company will spend $60 million this year to restructure. Jobs in sales, research and development, information technology, and administration will be shed.

The company will offset some of the cuts by adding research and development jobs and positions in information technology to offshore facilities in India and Israel, making the net reduction more like 8 percent when all is done.

. . . . .

The company's job cuts come on top of 230 earlier this year that were made as part of a plan to discontinue a product line and reduce positions that didn't relate to high-priority projects.

***1314** "Weak Quarter Leads BMC to Cut 900 Jobs,"*Houston Chronicle,* July 29, 2003, at 1 (emphases added) (included at A.R. 5-7; S.A.R. 63-64).[FN11]

FN11. The *Houston Chronicle* article refers to the termination of 230 BMC employees earlier in 2003. A.R. 6; *see also*"BMC Software Lays Off 230, Including 104 in Houston,"*Houston Chronicle,* March 1, 2003, at 2. It appears that those employees laid off in Spring 2003 filed their own TAA petition with the Labor Department. *See* A.R. 34-35 (notes of agency investigation in this case, referring to TAA petition TA-W-52,806); *see also*68 Fed.Reg. 58,717 (Oct. 10, 2003) (notice of receipt and notice of initiation of investigation of TAA petition TA-W-52,806).

Of course, the administrative record filed in this case gives no indication as to the nature and extent of that earlier agency investigation. Presumably it was as *pro forma* as the investigation at issue in this action. In any event, the Labor Department denied that petition as well, less than two months before the Workers here filed their TAA petition. That denial was never appealed. *See*68 Fed.Reg. 62,831, 62,832 (Nov. 6, 2003) (denying petition TA-W-52,806 on the grounds that "[t]he workers firm does not produce an article"-the same grounds on which the Labor Department denied the petition at issue here).

The Labor Department's certification in this case puts that earlier denial in sharp relief, and raises some troubling questions. At a minimum, the record compiled in this action demonstrates clearly that the agency's denial of the earlier petition was in error-for, as the Labor Department here ultimately found, BMC is indeed engaged in "production" of an "article," even under the relatively narrow definition of that concept that the agency was then applying. *See generally* n. 27 (discussing Labor Department's recent change of position on the treatment of software and similar "intangible" goods for purposes of TAA).

Moreover, it is easy to imagine that-had the Workers here known of the Labor Department's denial of the earlier petition filed by their coworkers-they might not have filed their own TAA petition (which would, in turn, have compounded the effect of the agency's error). *See generally* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 801 (noting that result of problems in Labor Department's administration of TAA program may be "an effective absence of due process altogether, as thousands of eligible workers may not even bother applying").

In any event, the Workers' success in this forum now ensures that the 104 Houston-based BMC employees terminated earlier in 2003, among others, are eligible for TAA benefits. But if the Labor Department had properly investigated TAA petition TA-W-52,806 and certified those 104 employees within the statutorily-mandated 40 days after the filing of their petition, they would have been eligible to receive benefits *as early as late September 2003*-and the Workers here (who would have been covered by such a certification) would have been eligible to receive TAA benefits promptly following their termination, and would never have had to file the petition at issue here, or to pursue the Labor Department's denial of that petition into court.

As section II.D (below) explains, the delays in TAA certification that result from agency errors and failures like those in these two BMC cases can take a very real human toll.

A copy of the *Houston Chronicle* article was included with the petition for TAA benefits that the Workers filed with the Labor Department in late December 2003. The petition alleged, *inter alia,* that the company was shifting jobs "offshore to India and Israel." A.R. 2-3, 5-7, 33. Appended to the Workers' petition were some 25 pages of announcements of job vacancies-primarily at BMC facilities in India and Israel-printed out from the company's website. A.R. 8-33.

In mid-January 2004, the Labor Department contacted BMC management concerning the Workers' TAA petition. Asked to "[b]riefly describe the business activities of BMC Software, Inc.," the company's Senior Manager for Human Resources responded by parroting-*verbatim*-a marketing pitch on BMC's website: [FN12]

> FN12. The administrative record filed with the Court does not include a blank questionnaire, or a memo or letter of any sort from the Labor Department forwarding questions to BMC for the company to answer, or any other evidence of the Labor Department's initial investigation-except for BMC's *response* (C.A.R.36-37) to questions somehow communicated to the company by the agency. Indeed, the administrative record includes no documentation whatsoever of the agency's initial contacts with BMC. *See generally* n. 30, *infra.*

***1315** BMC Software, Inc. (N.Y.SE: BMC), is a leading provider of enterprise management software solutions that empower companies to manage their IT infrastructure from a business perspective. Delivering Business Service Management, BMC Software solutions span enterprise systems, applications, databases and service management.
C.A.R. 36.[FN13]

> FN13. Although the Government has included BMC's response to the Government's inquiry in the Confidential Administrative Record, there is nothing remotely confidential about the "blurb" that the BMC official provided to the Labor Department. *See, e.g.,* BMC website (www. bmc. com), at "Corporate Profile," at "Investors," and at "BMC Software Corporation Information Statement" (where BMC "strongly encourages" the use of the quoted language "in all advertising, marketing, technical, press-statements, Web-based and other materials ... to describe the business of BMC Software").
>
> Indeed, the quoted language is included in the very news release that BMC issued to announce the "workforce reductions" that resulted in the Workers' terminations at issue here. *See*"BMC Software Reports First Quarter Results-Takes Action to Improve Profitability" (July 28, 2003) (news release).

The Labor Department also asked BMC to advise whether the company's Houston employees "produce an article of any kind or ... were engaged in employment related to the production of an article." There too the Senior Manager for Human Resources failed to respond directly to the Labor Department's inquiry, and instead proffered a "soundbite" plucked from the company's promotional materials:

BMC Software develops software solutions to proactively manage and monitor the most complex IT environments, enabling around-the-clock availability of business-critical applications. BMC also provides services to support its software products, including support and implementation services.

C.A.R. 36-37.[FN14]

> FN14.*See, e.g.,* BMC website (www. bmc. com), at "Press Releases" (including April 10, 2001 news release, "Brocade and BMC Software Expand Partnership to Deliver Application-Driven Storage Management for Brocade-Based SANs").

With no further inquiry, the Labor Department denied the Workers' TAA petition on January 20, 2004-although the Federal Register notice of the *initiation* of the investigation wasn't published till three weeks thereafter. *Compare* A.R. 44-45 (Negative Determination Regarding Eligibility to Apply for Worker Adjustment Assistance, dated Jan. 20, 2004) *with*69 Fed.Reg. 6694, 6695 (Feb. 11, 2004) (notice of receipt of petition and initiation of investigation). In effect, the agency's Federal Register notice of the initiation of the investigation invited the Workers to seek a hearing on a petition that the agency had already denied.

The Labor Department's official Negative Determination Regarding Eligibility to Apply for Worker Adjustment Assistance ruled that the Workers "develop[ed] software solutions," and thus "[did] not produce an article" within the meaning of the TAA statute. A.R. 44-45.[FN15]*See also****131669** Fed.Reg. at 11,888 (ruling that "[t]he workers firm

does not produce an article as required for certification [under the TAA statute]").[FN16]

> FN15. The Negative Determination similarly concluded that the Workers were ineligible for certification as service workers. According to that ruling:
>
> > Workers ... may be certified [as service workers] only if their separation was caused importantly by a reduced demand for their services from a parent firm, a firm otherwise related to their firm by ownership, or a firm related by control. Additionally, the reduction in demand for services must originate at a production facility whose workers independently meet the statutory criteria for certification, and the reduction must directly relate to the product impacted by imports. These conditions have not been met for workers at this firm.
>
> A.R. 44-45. *See also* n. 21, *infra.*
>
> FN16. It is unclear why Federal Register publication of the notice of the denial of the Workers' petition was delayed until March 11, 2004, when the petition had been denied almost seven weeks earlier (on January 20, 2004). *Compare* A.R. 44-45 (Negative Determination Regarding Eligibility to Apply for Worker Adjustment Assistance, dated Jan. 20, 2004) *with* 69 Fed.Reg. 11,887, 11,888 (March 12, 2004) (notice of denial of petition). Indeed, the official notice of the denial of the Workers' petition was not published in the Federal Register until more than a month after the Workers filed their request for reconsideration of that ruling. *See* A.R. 53 (Workers' request for reconsideration of denial of petition, dated Feb. 9, 2004).

According to an undated internal agency memorandum documenting the "Findings of the Investigation," the Labor Department concluded-solely on the strength of the information supplied by BMC's Senior Manager for Human Resources-that the Workers were "engaged in the development of" software, and thus "provide[d] development services." To support the agency's conclusion that "[BMC][w]orkers do not produce an article," the agency memorandum erroneously attributed a statement to that effect to BMC's Senior Manager for Human Resources. *See* C.A.R. 42.[FN17] The memorandum also stated that BMC's "Standard Industrial Classification" ("SIC") code is 7371 (the code for "Computer Programming Services"), although the source of that information was not specified, and the relevance and accuracy of the information are dubious at best. *Id.*[FN18]

> FN17. Contrary to the representation in the internal agency memorandum, BMC's Senior Manager for Human Resources in fact *had not* stated that the company does not produce a product. *Compare* C.A.R. 42 (undated internal agency memorandum) *with* C.A.R. 36-37 (BMC's responses to agency questions in course of initial investigation).
>
> > As discussed above, in response to the Labor Department's query whether the company produced a product, BMC's Senior Manager for Human Resources stated:
> >
> > BMC Software develops software solutions to proactively manage and monitor the most complex IT environments, enabling around-the-clock availability of business-critical applications. BMC also provides *services* to support its software *products,* including support and implementation *services.*
> >
> > C.A.R. 36-37 (emphases added). That response cannot fairly be read as a statement that BMC does not produce a product. To the contrary, as discussed in section II.A below, the response itself expressly refers to BMC "products" (and, indeed, also refers-in contrast-to the company's provision of "services" as well, implicitly distinguishing the two).
>
> FN18. *See generally* section II.C & n. 54, *infra* (explaining, *inter alia,* that other sources identify BMC's SIC code as 7372). *See also Former Employees of Murray Engineering, Inc. v. Chao,* 28 CIT ----, ----, -

---, 346 F.Supp.2d 1279, 1284, 1289 (2004) ("*Murray Engineering I*") (criticizing agency's reliance on former employer's NAICS code in TAA investigation); *Murray Engineering II*, 28 CIT at ---- n. 8, 358 F.Supp.2d at 1273 n. 8 (same); *Merrill Corp. II*, 29 CIT at ----, 387 F.Supp.2d at 1345. *Cf. IBM I*, 29 CIT at ----, 387 F.Supp.2d at 1348-49.

> As the Labor Department's website explains, the Standard Industrial Classification ("SIC") system historically has been used by that agency and other parts of the federal government to classify businesses by the industry in which they are engaged, for statistical and other purposes. According to the website, the North American Industry Classification System ("NAICS") replaces the SIC system. For additional information, including a copy of the Standard Industrial Classification Manual, see the Labor Department's website.

Copies of the Labor Department's Negative Determination were sent to the ***1317** Workers under cover of a standard form letter which advised them of their right to seek administrative reconsideration by the agency. Incredibly, however, the Labor Department's letter said nothing about the Workers' right to challenge the Negative Determination in this court. *See* A.R. 46-49.[FN19]

> FN19. *See also* IBM, 29 CIT at ----, 403 F.Supp.2d at 1321 (criticizing Labor Department's "fail[ure] to advise the Former Employees [of IBM] of the option of seeking judicial review instead" of seeking administrative reconsideration of denial of TAA certification).

The Workers timely sought reconsideration of the denial. In their request for reconsideration, the Workers emphasized that the Labor Department's Negative Determination erroneously stated that the *investigation* was *initiated* on October 9, 2003-a date that was actually several months before the *petition* was even *filed*. The Workers disputed the Labor Department's determination that BMC did not produce an article, and referred the agency to three specific locations on BMC's website, including "an online store for purchasing BMC *products* and *product lines.*" A.R. 53 (emphases added). The Workers quoted the BMC website:

> Now you're ready to shop online with BMC Software. Browse through the store by category or by the A-Z list below. If you know the name of your *product*, use the *Product* Name Search field to locate your product quickly.

Id. (emphases added). The Workers explained that "[t]he use of the term 'solutions' is misleading. Usage of the term 'solutions' within the BMC Software, Inc. web page and other places is synonymous with 'product lines.' " And the Workers again stated that BMC was shifting work "to overseas companies as well as newly created BMC locations overseas." The Workers added that software was also being "imported to make up the products and product lines that BMC Software, Inc. produces." A.R. 53.

In response to the Workers' request for reconsideration, a Labor Department staffer called BMC's Senior Manager for Human Resources (the same company official who had responded to the agency's initial request for information). The BMC official reportedly stated flatly that "no products are manufactured" by the company, and that the company's software is not "recorded on media disks," nor is it "mass-produced" or "sold off-the-shelf." She further stated that "most [of BMC's] software is customized for individual users," and denied that jobs had been transferred abroad. C.A.R. 55.

The agency staffer apparently failed to ask any follow-up questions concerning, for example, the nature and volume of BMC software that is *not* "customized for individual users." Similarly, the staffer failed to explore with the BMC official the allegations of increased imports raised in the Workers' request for reconsideration. Indeed, the agency staffer did nothing to confront the BMC official with any of the information provided by the Workers. Nor did the staffer make any other effort to reconcile the evident discrepancies and inconsistencies in the information before the agency.

Based on nothing more than its phone conversation with BMC's Senior Manager for Human Resources, the Labor Department denied the Workers' request

for reconsideration, ruling once again that they were "not considered to have been engaged in production." [FN20]***1318**69 Fed.Reg. at 20,642.[FN21] The Labor Department summarized its rationale, emphasizing the concept ***1319** of "tangibility": [FN22]

> FN20. The Labor Department's notice denying the Workers' request for reconsideration further stated: "The petitioner also alleges that imports impacted layoffs, asserting that because workers lost their jobs due to a transfer of job functions overseas, petitioning workers should be considered import impacted." 69 Fed.Reg. at 20,642.
>
> There are, however, at least two problems with that statement. First, as discussed immediately above, the Labor Department investigator reviewing the request for reconsideration failed to ask BMC about the Workers' claims of increased imports. *See* C.A.R. 55. There is therefore nothing in the record on the request for reconsideration to support an agency finding on increased imports. And, second, the quoted statement improperly conflates two separate bases for TAA certification-increased imports *versus* a shift in production-and is simply illogical. *Compare*19 U.S.C. § 2272(a)(2)(A) (Supp. II 2002) (increased imports) *and*19 U.S.C. § 2272(a)(2)(B) (Supp. II 2002) (shift in production) (both quoted in n. 6, *supra*).
>
> FN21. Similarly, the notice denying the request for consideration reiterated the agency's prior ruling that the Workers also could not be certified as "service workers"-albeit based on a rather different rationale:
>
> > Only in very limited instances are service workers certified for TAA, namely the worker separations must be caused by a reduced demand for their services from a parent or controlling firm or subdivision whose workers produce an article and *who are currently under certification for TAA.* The investigation revealed no such affiliations.
>
> 69 Fed.Reg. at 20,642 (emphasis added).
>
> Although the error is of no significance in this case (since the Workers here have now been certified), it is worth noting that the formulation in the Labor Department's notice denying the Workers' request for reconsideration (quoted immediately above) materially misstated the test for certification as "service workers."
>
> In that formulation of the "service workers" test, the Labor Department would require that the separations of the petitioning workers be attributable to a reduced demand for their services by a facility *"whose workers* produce an article and *...are currently under certification for TAA."Id.* (emphasis added). In contrast, in its initial Negative Determination denying the Workers' petition, the agency accurately stated the "service workers" test-"the reduction in demand for [the petitioning workers'] services must originate at a production facility *whose workers independently meet the statutory criteria for certification."* (Emphasis added.) *See* n. 15, *supra (quoting* Negative Determination Regarding Eligibility to Apply for Worker Adjustment Assistance, at A.R. 44-45). *See generally Chevron I,* 26 CIT at 1285, 245 F.Supp.2d at 1328 (citations omitted) (discussing criteria for TAA certification as "service workers").
>
> As *Chevron I* explained, "The question is not whether there was a certification already *in effect.* Instead, what the Labor Department must determine is whether workers at the relevant production facility met the criteria for certification-whether or not they actually sought it." *Id.,* 26 CIT at 1288, 245 F.Supp.2d at 1331 (*citing Former Employees of Marathon Ashland Pipeline, LLC v. Chao,* 26 CIT 739, 747-48, 215 F.Supp.2d 1345, 1355 (2002) ("*Marathon Ashland I"); Champion Aviation I,*23 CIT at 354, 1999 WL 397970; *Bennett v. U.S. Sec'y of Labor,* 20

CIT 788, 792, 1996 WL 434685 (1996)).

The distinction between the two formulations of the "service workers" test (essentially whether the workers at the relevant production facility must already be "certified" *versus* whether they would be/would have been "certifiable") may be subtle, but it can be quite significant-particularly for the potentially large numbers of workers who qualify under the correct formulation of the test ("certifiable"), but not the other.

In correspondence in another recent TAA case (in which the Labor Department had made the same mistake), the Court brought this issue to the attention of the Government. *See* Letter to Counsel for Defendant from the Court (April 23, 2004), *filed in Former Employees of IBM Corp. v. U.S. Sec'y of Labor,* Court No. 04-00079; *see generally IBM,* 29 CIT at ---, 403 F.Supp.2d at 1318 (discussing Labor Department's clarification of "certified" *versus* "certifiable," in context of "service workers" test). That letter noted that initial research indicated that the Labor Department had not been consistent in its formulation of the "service workers" test. The letter continued:

[O]ur initial research [also] has disclosed no discussion of a *legal* rationale for either "certified" or "certifiable." It is, in any event, unclear-at least at first blush-whether there could be any legitimate *policy* basis for limiting service worker coverage to those cases where the production workers are already "certified." It would, no doubt, be easier for the Labor Department to determine whether a group of production workers was already certified than it would be to determine whether they *could* be certified. But, in light of the remedial purpose of the trade adjustment assistance laws, it is unclear whether mere administrative convenience would suffice to justify limiting coverage of service workers.

Moreover, it seems clear that the remedial purpose of the laws would be better served by covering service workers whenever the relevant group of production workers *could* be certified (whether they actually have been certified, or not). For example, it is possible to imagine a group of production workers displaced by imports who do not need retraining (*i.e.,* because their skill set makes them readily employable in some other, non-trade impacted industry). The service workers who formerly supported the production workers, on the other hand, may require retraining (if their skills are not readily transferable).

Id. at 2-3; *see generally IBM,* 29 CIT at ---, 403 F.Supp.2d at 1318. *See also UAW v. Marshall,* 584 F.2d at 396-97 (in construing provision of TAA statute, Labor Department's "interpretation ... is to be shaped with[ ] reference to the general remedial purpose" of TAA statute; agency is obligated to interpret provision so that it "best effectuates the [remedial] purposes of the [TAA statute] in light of the circumstances of the individual case").

In response to the Court's letter in *IBM,* the Labor Department sought a voluntary remand of that case, explaining that the test applied by the agency there (which purported to require that the relevant production facility already be "certified") "[did] not reflect Labor's current interpretation" of the TAA statute concerning certification of "service workers." *See* [Defendant's] Consent Motion for Voluntary Remand (May 14, 2004), *filed in Former Employees of IBM Corp. v. U.S. Sec'y of Labor,* Court No. 04-00079. According to the Government's motion for remand in that case:

Labor's current interpretation [concerning certification of "service workers"] eliminates any distinction between certified and certifiable workers and focuses directly upon whether the

petitioning worker group meets the statutory test for eligibility for certification. As of April 2004, Labor will certify petitions from workers who perform services for a firm or an appropriate subdivision of such firm if the work of the petitioning workers is related to the firm's production of a "trade-impacted" article under 19 U.S.C. § 2272 and the workers otherwise satisfy [statutory] eligibility criteria.

Id. at 4-5 (emphasis added). *See also* "DOL Planning More In-Depth Probes of Service Workers' Eligibility for TAA," BNA Int'l Trade Reporter, June 17, 2004, at 1019 (explaining that "[u]nder the new policy, DOL will investigate whether service workers seeking TAA benefits performed work 'in support of any production' and will 'conduct further data collection in cases where related production exists' ").

There is, thus, an important distinction between the criteria for certification as "service workers" and those for certification as "secondary workers." The express terms of the TAA statute require that-to be eligible for certification as "secondary workers"-"the [petitioning] workers' firm (or subdivision) ... [must be] a supplier or downstream producer to a firm (or subdivision) that employed *a group of workers who received a certification* of eligibility" for TAA benefits. 19 U.S.C. § 2272(b)(2) (Supp. II 2002) (emphasis added).

Finally, it is also worth noting that the Labor Department recently extended its coverage of "service workers" to include certain so-called "leased workers." *See generally IBM,* 29 CIT at ----, ---- n. 38, 403 F.Supp.2d at 1315-18, 1336 n. 38 (summarizing history of "leased workers" policy, and remanding matter to agency with instructions to, *inter alia,* publish a "public document" setting forth agency's policy); 71 Fed.Reg. 10,709, 10,712 (March 2, 2006) (Negative Determination on Remand in *IBM,* the "public document" in which Labor Department sets forth its "interim response" articulating its "leased workers" policy, and specifies "seven criteria that will be applied to determine the extent to which a worker group engaged in activities related to the production of an article by a producing firm is under the operational control of the producing firm"; asserting that agency "retains the discretion to further revise this policy, so that the subject of 'operational control' can continue to receive close scrutiny as DOL undertakes rulemaking to update the regulations").

FN22. The Labor Department has advanced similar views-articulated in varying formulations-in a number of cases filed with the court in recent years involving software and similar "intangible" goods. Because BMC in fact sells its software "prepackaged" in "shrink wrap form" as well as electronically ("in object code form"), the Workers in this case qualified for TAA certification even under the criteria that the Labor Department was applying at the time. There is therefore no need here to reach the substantive merits of those criteria, except to note that the Workers vigorously disputed them, and that the agency has since repudiated them. *See* nn. 25 & 27, *infra.*

See generally, e.g., Former Employees of Ericsson, Inc. v. U.S. Sec'y of Labor, Court No. 02-00809 (petitioning workers who "designed, wrote code for, and tested software programs" ultimately certified based on Labor Department's determination that they "supported production at an affiliated software production facility"); *Former Employees of Murray Engineering, Inc. v. United States,* Court No. 03 -00219 (petitioning workers who produced custom designs for industrial machinery which were embodied on physical media (CD Roms and paper) ultimately denied certification, based on Labor Department's determination that former employer had

not shifted design work abroad and that there had been no increase in imports of "like or directly competitive" articles); *Former Employees of Electronic Data Systems Corp. v. U.S. Sec'y of Labor,* Court No. 03-00373 (petitioning workers who developed "financial applications software" as well as enhancements, including new code, ultimately certified based on recent change in Labor Department policy concerning definition of "article"); *Former Employees of Mellon Bank, N.A. v. U.S. Sec'y of Labor,* Court No. 03-00374 (petitioning workers who "designed and developed computer software applications ... to provide financial services to [bank] customers" ultimately denied certification, based on Labor Department's (now repudiated) rationale that "informational products that could historically be sent in letter form and that can currently be electronically transmitted" are not "articles" for purposes of TAA, and the "the design and development of ... software itself" does not constitute "production"); *Former Employees of Sun Apparel of Texas v. U.S. Sec'y of Labor,* Court No. 03-00625 (petitioning garment workers ultimately denied certification based on Labor Department's determination that "patterns and markers" produced by workers "were created by using special computer programs,""were neither stored nor transmitted in a physical medium, but existed in an electronic form (such as a file on a computer server or an electronic mail)," "were electronically manipulated," and "were sent exclusively via electronic mail"); *Former Employees of IBM Corp., Global Services Division v. U.S. Sec'y of Labor,* Court No. 03-00656 (petitioning "software developers who write and test computer software" ultimately certified based on recent change in Labor Department policy concerning definition of "article"); *Former Employees of Merrill Corp. v. United States,* Court No. 03-00662 (in light of recent change in Labor Department policy concerning definition of "article," action presently on remand to agency for reconsideration of agency's prior denial of certification of workers who "created electronic documents for printing and filing with the Securities and Exchange Commission," where denial was based on, *inter alia,* agency's (now disavowed) reasoning that "electronic creations are not 'articles' for the purposes of the Trade Act unless they are embodied in a physical medium"; remand results due to be filed Aug. 31, 2006); *Former Employees of Computer Sciences Corp. v. U.S. Sec'y of Labor,* Court No. 04-00149 (petitioning workers who produced "financial software" ultimately certified based on recent change in Labor Department policy concerning definition of "article"); *Former Employees of Gale Group, Inc. v. U.S. Sec'y of Labor,* Court No. 04-00374 (petitioning workers who "created electronic documents and performed electronic indexing services and occasionally wrote abstracts of articles" ultimately certified based on recent change in Labor Department policy concerning definition of "article"); *Former Employees of Lands' End Business Outfitters v. U.S. Sec'y of Labor,* Court No. 05-00517 (petitioning workers who "create[d] digitized embroidery designs from customers' logos" ultimately certified based on recent change in Labor Department policy concerning definition of "article").

Software design and developing are ***1320** not considered production of an article within the meaning of [the TAA statute]. Petitioning workers do not produce an "article" within the meaning of [that statute]. Formatted electronic software and codes are not *tangible****1321** commodities, that is, marketable products, and they are not listed on the Harmonized Tariff Schedule of the United States (HTS), ... which describes articles imported to the United States.

To be listed in the HTS, an article would be subject to a duty on the tariff schedule and have a value that makes it marketable, fungible and interchangeable for commercial purposes. Although a wide variety of *tangible* products are described as articles and characterized as dutiable in the HTS, informational

products that could historically be sent in letter form and that can currently be electronically transmitted ... are not listed in the HTS. Such products are not the type of products that customs officials inspect and that the TAA program was generally designed to address.

Id. (emphases added).[FN23]

FN23. The administrative record filed with the Court in this case includes letters transmitting the notice of the denial of the request for reconsideration to only two of the four Workers who signed the petition. *See* A.R. 60-61. It is unclear whether the Labor Department failed to send such letters to the other two Workers, or whether it sent them but failed to include them in the administrative record.

This action ensued. In lieu of filing an Answer with the court, the Government sought and was granted a voluntary remand to conduct a further investigation and to make a redetermination as to the Workers' eligibility for TAA benefits.[FN24]

FN24. As grounds for the voluntary remand, the Government cited the Labor Department's "need[ ] to resolve an apparent conflict between information provided by company officials and information provided by the petitioners" (specifically, whether BMC produces "products"). However, as counsel for the Government candidly conceded, the "conflict" between information provided by the petitioners and that provided by BMC was "apparent" during the course of the Labor Department's investigation-long before the Workers filed their Complaint with the Court. *See* [Defendant's] Second Amended Motion for Voluntary Remand (July 6, 2004), at 3 (relying in part on information provided with Worker's "request for administrative reconsideration"). *Cf.* Letter from the Court to Defendant (March 19, 2004), *filed in Former Employees of Paradise Fisheries v. United States,* Court No. 03-00758 (rejecting Labor Department's claim that TAA certification was based on "new information" supplied to agency after Complaint was filed; "While it may be true that the Labor Department had previously *failed* to make the connection, it cannot honestly be said that the agency was *'unable'* to make the connection before the Complaint was filed.").

On remand, the Labor Department reiterated-and elaborated on-its test for "production" of an "article" in the context of the software industry, further emphasizing the characteristic of "tangibility":

The Department has consistently maintained that the design and development of software is a service. In order to be treated as an article, for TAA purposes, a software product must be *tangible,* fungible, and widely marketed. The Department considers software that is mass-replicated on physical media (such as CDs, tapes, or diskettes) and widely marketed and commercially available (*e.g.,* packaged "off-the-shelf" programs) and dutiable under the Harmonized Tariff Schedule of the United States to be an article. The workers designing and developing such products would be considered to be engaged in services supporting the production of an article.

69 Fed.Reg. at 76,783 (emphasis added).[FN25]***1322** Applying that analysis in the course of its remand investigation here, the Labor Department "raised additional questions and obtained detailed supplemental responses from the company." *Id.*

FN25. Again, as explained in note 22 above, there is no need here to reach the substantive merits of the criteria for TAA certification of software workers that the Labor Department applied in this case. But the Workers took strong exception to those criteria. In a letter to the Labor Department, counsel for the Workers took pains to emphasize that, although they were providing the agency with information to demonstrate that the Workers fulfilled the criteria articulated by the agency, "[n]othing ... [in the Workers' communications] should be construed as acquiescence to the Department of Labor's view that a *physical* product *listed in the Harmonized Tarif Schedule* must have been produced ... in order for the[ ] former employees to be entitled to benefits under the TAA."S.A.R.

34 (emphases added).

The information provided by BMC in the course of the remand proceedings conflicted with the information that the company had supplied earlier, and bore out the Workers' claims, casting an entirely new light on the merits of the Workers' TAA petition. Reiterating its position that "to be treated as an article ... for TAA purposes, a software product must be *tangible,"* the Labor Department explained:

[T]he new information showed that, in addition to software design and development, the firm does, in fact, mass-replicate software at the subject facility. Further, software produced by the firm at the subject facility includes not only custom applications, but [also] packaged 'off-the-shelf' applications which are mass-replicated *on various media (CDs and tapes*) at the subject facility.

69 Fed.Reg. at 76,783 (emphases added). Noting that BMC employees "are not separately identifiable by product line," the Labor Department concluded that the Workers here were, indeed, "engage[d] in activity related to the production of an article." *Id.*

On remand, the Labor Department also re-evaluated the Workers' allegations that BMC had shifted production overseas, to India and Israel. 69 Fed.Reg. at 76,783. The agency concluded that "there was no shift in production, for TAA purposes." *Id.* However, the agency did find that "employment and production of packaged, mass-replicated software at the subject facility had declined significantly from 2002 to 2003," that "company imports of mass-replicated software increased during the same period," and that "the increase in company imports represented a significant percentage of the decline in production at the subject facility during the relevant period." *Id.*[FN26]

FN26. As explained in greater detail above (and in notes 20 and 35), the Workers' request for reconsideration alleged an increase in imports of BMC products and product components. However, the Labor Department made no effort to investigate that allegation until after this action was filed. *Compare* A.R. 53 *with* C.A.R. 55 *and* A.R. 56-59. *Cf. Sun Apparel I,* 28 CIT at ----, 2004 WL 1875062 at * 2 (although "the record ... contained no evidence to support its findings, Labor nevertheless determined that [the subject company] did not increase its imports").

The Labor Department therefore determined on remand "that increases of imports of articles like or directly competitive with those produced at BMC Software, Inc., Houston, Texas, contributed importantly to the total or partial separation of a significant number of workers and to the decline in sales or production at that firm." Accordingly, nearly one full year after the TAA petition was filed (and more than 16 months after the Workers here lost their jobs), the Labor Department certified as eligible to apply for benefits all Houston-based BMC employees "who became totally or partially separated from employment on or after December 23, 2002, through two years from the issuance of [the] revised determination." 69 Fed.Reg. at 76,783-84.

Moreover, the Labor Department has recently revised its position to recognize ***1323** that-at least for purposes of cases such as this-"there are tangible and *intangible* articles," and that "the production of intangible articles can be distinguished from the provision of services." *See, e.g.,* Computer Sciences Corporation: Notice of Revised Determination on Remand, 71 Fed.Reg. 18,355 (April 11, 2006) (emphasis added). Accordingly, "[s]oftware and similar *intangible* goods that would have been considered articles for the purposes of the Trade Act if embodied in a physical medium will now be considered to be articles regardless of their method of transfer." *Id.* (emphasis added). In short, as the Labor Department apparently now concedes, the Workers here would have been entitled to TAA certification even if BMC's software had not been "replicated on various media (CDs and tapes)"-that is, even if it had not been in "tangible" form.[FN27]

FN27. The Labor Department's revised policy is the culmination of a large body of caselaw roundly criticizing the bankrupt logic of the agency's longstanding position on the treatment of software and similar "intangible" goods for purposes of TAA. *See generally* n. 22, *supra.* In truth, the agency's new position is not a new "policy" at all. Nor is it based on some new interpretation of law. In reality, the Labor Department's recent change of position

reflects nothing more than the agency's belated acknowledgment and correction of certain fundamental mistakes of fact on which its longstanding position on "[s]oftware and similar intangible goods" was premised-mistakes to which the agency had repeatedly turned a blind eye and deaf ear.

> Already the Labor Department's revised position has resulted in the agency's certification of a number of groups of workers whose TAA claims had been repeatedly denied, and who had sought recourse in the court. *See, e.g.,* Computer Sciences Corporation: Notice of Revised Determination on Remand, 71 Fed.Reg. 18,355 (April 11, 2006); Electronic Data Systems Corporation: Notice of Revised Determination on Remand, 71 Fed.Reg. 18,355 (April 11, 2006); Lands' End: Notice of Revised Determination on Remand, 71 Fed.Reg. 18, 357 (April 11, 2006); IBM Corporation: Notice of Revised Determination on Remand, 71 Fed.Reg. 29,183 (May 19, 2006); Gale Group, Inc.: Notice of Revised Determination on Remand, 71 Fed.Reg. 43,213 (July 31, 2006).

The full extent of the damage attributable to the Labor Department's protracted adherence to its indefensible position is incalculable. To begin with, it in unclear whether the outcomes of any other TAA cases filed with the court in recent years would have differed had the Labor Department acknowledged and corrected its mistakes at an earlier date. *But see* n. 79, *infra.* But, at a minimum, it seems highly likely that, in recent years, the Labor Department has denied TAA petitions from workers in the software industry that the agency would now agree should have been granted, and which were never appealed in court. And it is a virtual certainty that there are workers in the software industry who would have filed TAA petitions with the Labor Department, but were deterred by the agency's longstanding-and now repudiated-position. *See generally* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 801 (noting that result of problems in agency's administration of TAA program may be "an effective absence of due process altogether, as thousands of eligible workers may not even bother applying").

II. *Analysis*

To be sure, the Workers are gratified by the Labor Department's affirmative determination granting their TAA petition. But they are also quite understandably bewildered that it took the agency so long to grant them the relief to which they are entitled. And they are frustrated that they had to haul the Labor Department into court to force the agency to take a hard look at their claim. Moreover, while the Government is to be commended for recognizing the need for a voluntary remand, the Labor Department's "about-face" as a result of that remand simply underscores the fact that the agency should have certified these Workers in the first place, within 40 days of receipt of their petition.

***1324** In this case, like so many others in recent years, the agency's "investigation" was "a shockingly cursory process." [FN28] In short, as discussed more fully below, it exalts form over substance to characterize as an "investigation" the Labor Department's superficial review of the Workers' petition at the agency level.[FN29]

> FN28.*See Harper's Magazine* at 63 (explaining that, after a TAA petition is filed, the Labor Department "initiates an investigation, which involves faxing the company a few generic forms and sometimes making a follow-up phone call or two.... It is a shockingly cursory process").

> FN29. An "investigation" is defined as a "detailed examination" or "a searching inquiry," "an official probe." Webster's Third New International Dictionary (Unabridged) 1189 (2002). The Labor Department's track record in TAA cases in this court belies any suggestion that the agency's typical initial review of a TAA petition can fairly be described as an

"investigation." Indeed, one senior government lawyer familiar with the Labor Department's process has implicitly conceded as much:

> [A]lthough Congress has mandated that Labor conduct an "investigation," *with all the active and exhaustive connotations which that term might imply*, the reality is that Congress also has appropriated a finite amount of resources for the conduct of these investigations.

McCarthy at 14 (emphasis added). *See generally* 19 U.S.C. § 2271(a) (requiring Labor Department to give notice that agency "investigation" has been initiated).

The bottom line, however, is that Congress has mandated that the Labor Department "investigate" workers' TAA claims-*not* that those claims be, for example, merely "considered," or "evaluated," or "reviewed." *See Shoshone Indian Tribe v. United States*, 364 F.3d 1339, 1347 (Fed.Cir.2004) (and cases cited there) (In statute of limitations provision, "Congress's choice of the phrase 'shall not commence to run' instead of 'tolls' should be given effect. There exists a strong presumption that 'Congress expresses its intent through the language it chooses' and that the choice of words in a statute is therefore deliberate and reflective."). Moreover:

> [I]f the [Labor Department's] resources are not adequate to enable it to meet its statutory mandate, the remedy lies with Congress. The volume of claims filed with the agency cannot serve to excuse it from fulfilling its legal obligations *vis-a-vis* the legions of displaced workers. Indeed, if anything, the volume of claims filed serves to underscore the vital nature of the agency's mission. *Ameriphong*, 27 CIT at ----, 288 F.Supp.2d at 1360.

A. *The Labor Department's Failure to Identify and Resolve Discrepancies and Inconsistencies in Information Provided to It*

[4] The entirety of the Labor Department's initial investigation here consisted of a mere five questions (all of which were either very basic, or conclusory, or both), posed to BMC's Senior Manager for Human Resources. C.A.R. 36-37.[FN30] The record***1325** reveals that the agency made no effort whatsoever to follow up with company officials (via telephone or otherwise)-even though the company's responses to the Labor Department's few substantive questions were non-responsive, ambiguous, and/or inconsistent with other information on the record, and thus begged for clarification.

> FN30. As note 12 explains, the Labor Department omitted from the administrative record all documentation of its initial contact with BMC.
>
> The agency's Petition Log Sheet (A.R.1) indicates that BMC was contacted on January 12, 2004. But the administrative record includes no documentation of that contact. There are no notes of the Labor Department's initial telephone call(s) or e-mail message(s) to BMC-no indication as to which agency staffer contacted BMC, no indication as to which BMC official(s) were contacted, no indication as to the mode of communication, and no indication as to the substance of that communication. The Petition Log Sheet also indicates that the agency issued a data request to BMC that same day. *See* A.R. 1. But that data request, too, is missing from the administrative record. Nor does the record include a copy of any Labor Department letter or memo to BMC communicating its questions to the company. It is thus impossible to discern from the record whether the agency forwarded to BMC the standard Business Confidential Data Request questionnaire that the agency has typically used in TAA cases.
>
> The sole evidence of the Labor Department's contact with BMC in the course of the initial investigation is BMC's *response* to the agency's inquiries, which consists of the company's answers

to a mere five questions:

(1) What is the full legal name and address of your firm?

(2) Is your firm affiliated with another company? If so, name the affiliated company (including address) and describe the affiliation.

(3) Briefly describe the business activities of BMC Software, Inc., Houston, TX (TA-W-53,918).

(4) Do the workers in BMC Software, Inc., Houston, TX (TA-W-53,918) of your firm produce an article of any kind or were they engaged in employment related to the production of an article? If workers do produce an article, please explain, and what is the product?

(5) Briefly explain the circumstances relating to separations at your firm that have taken place in the last year.

C.A.R. 36-37. The Labor Department's questions were simply much too vague and generalized, and were not reasonably calculated to elicit the necessary information-at least not without agency follow-up.

For example, although the Labor Department knew from the name of the corporation (as well as the Workers' TAA petition form) that BMC is a software company, the agency failed to inquire whether BMC's software is "tangible, fungible, and widely marketed," or whether it is "mass-replicated on physical media (such as CDs, tapes, or diskettes) and widely marketed and commercially available (*e.g.,* packaged 'off-the-shelf programs')"-the very criteria that the Labor Department at the time professed to "consistently" apply in cases such as this. *See*69 Fed.Reg. at 76,783. Similarly, the agency's broad request for a brief explanation of "the circumstances relating to separations" at BMC was no substitute for specific questions about factors such as increased imports and shifts in production abroad.

For example, as discussed in section I.B above, BMC's Senior Manager for Human Resources supplied "canned" marketing pitches in response to both the Labor Department's request for a description of the company's business, and the agency's inquiry as to whether BMC workers "produce an article." It would be, frankly, impossible for anyone-including the Labor Department-to discern from BMC's non-responsive answers whether or not the company's software constitutes a "product" within the Labor Department's interpretation of the TAA laws at that time (that is, whether BMC's software is mass-replicated on physical media (such as CDs, tapes, or diskettes) and is widely marketed and commercially available (*e.g.,* packaged for "off-the-shelf" sale)). Nevertheless, the Labor Department failed to seek any clarification-from either BMC or the Workers.

Indeed, in responding to the Labor Department's query whether the company's workers "produce an article," BMC's Senior Manager for Human Resources herself actually used the term "products"-*i.e.,* "software *products*"-in describing BMC's business. *See* C.A.R. 37 (emphasis added). Yet, not only did the Labor Department fail to seek clarification of that ambiguous reference, but the agency investigator even purported to rely on the company official's statement as the sole basis for the agency's affirmative conclusion that BMC employees *do not* produce a "product":

According to company official, [the Senior Manager for Human Resources], the workers at BMC ...*did not* produce a *product.*

Compare C.A.R. 42-43 (undated internal agency memorandum) (emphases added) *with* C.A.R. 36-37 (BMC's responses to agency questions in course of initial investigation). The Labor Department investigator thus impermissibly distorted what little information was supplied by the company*1326 in response to the agency's inquiries.[FN31]

FN31. Regrettably, this is no isolated incident. The Labor Department has been criticized for distorting and misrepresenting

evidence in other cases as well. *See generally IBM*, 29 CIT at ---- & n. 34, 403 F.Supp.2d at 1334-35 & n. 34 (Labor Department's determination "spins" information, with effect of "obscur[ing]" its true significance); *Former Employees of Federated Merch. Group v. United States*, 29 CIT ----, ----, 2005 WL 290015 at * 5 (2005) (agency "mischaracteriz[ed]" e-mail exchange in which company official explained reason for workers' separation, resulting in improperly "truncated" investigation); *Sun Apparel I*, 28 CIT at ----, 2004 WL 1875062 at ---- 4, 8 (where employer stated only that patterns and markers were "shipped primarily" by electronic means, agency erred by ignoring employer's limiting use of "primarily" and instead drawing "the much broader conclusion that [*all*] the patterns and markers were generated and shipped electronically" and, on that basis, concluding that no "production" occurred); *Former Employees of Pittsburgh Logistics Sys., Inc. v. U.S. Sec'y of Labor*, 27 CIT ----, ----, ---- n. 9, 2003 WL 22020510 at **9, 13 n. 9 (2003) ("*Pittsburgh Logistics II*") (in one instance, Labor Department "egregiously" quoted contract provision "out of context"; more generally, court took agency to task for repeated use of "out-of-context quotations").

Similarly, the Labor Department made no attempt to reconcile the discrepancy between information supplied by the Workers in their TAA petition and the agency's conclusion that "the workers at BMC ... did not produce a product." For example, near the top of a number of the pages of job vacancy announcements printed out from BMC's website (and appended to the Workers' TAA petition) is a banner consisting of six buttons, labeled "Home," "Partners," "Support," "Store," "Education," and-significantly-"Products & Solutions." *See, e.g.*, A.R. 12, 17, 21, 26, 31 (emphasis added). And the job vacancy announcements themselves included listings not only for positions such as "Systems Programmers" and "Programmer Analysts," but also for positions such as "*Product* Developers" and "Sr. *Product* Developers." *See, e.g.*, A.R. 8-9, 11-14, 19, 22, 24-25, 27-30 (emphases added).

To be sure, an employer's use of the term "product" is by no means conclusive, or binding on the Labor Department. But it is equally clear that such a use warrants further inquiry by the agency, and that-absent such further inquiry, accompanied by a reasoned explanation of the facts (reconciling the company's use of the term)-the agency is not free to conclude (as it did here) that petitioning workers do not produce a product.

The Labor Department further failed even to acknowledge-much less seek to resolve-apparent inconsistencies between other information provided by the Workers in their TAA petition and that supplied by their former employer, BMC. For example, asked by the Labor Department to "[b]riefly explain the circumstances relating to separations at [BMC]," the company's Senior Manager for Human Resources responded simply that the company had taken "significant restructuring actions, including reductions in force, to reduce its ongoing operational expenses to be in line with the revenue that [was then] currently being generated." C.A.R. 37. The Labor Department made no effort whatsoever to plumb the meaning of that wholly uninformative response.

Certainly the agency made no effort to press BMC on the underlying causes of the layoffs,[FN32] or the specifics of BMC jobs being moved overseas. Yet the *Houston Chronicle* article appended to the Workers'***1327** TAA petition reported that, while BMC jobs in Houston and elsewhere were being slashed, the company planned to "offset some of the cuts" by adding positions "to offshore facilities in India and Israel." A.R. 5-6. And the vast majority of the listings in the 25 pages of BMC job vacancy announcements included with the Workers' TAA petition were for positions in India and Israel. *See* A.R. 8-32. That and other critical information was either overlooked or simply ignored in the Labor Department's preparation of its "Findings of the Investigation" and in its initial negative determination. C.A.R. 42-43; A.R. 44-45.

FN32. BMC's response to the Labor Department's question (quoted above) was little more than a tautology, not illuminating in the least. *See* C.A.R. 37. In essence, BMC responded that the company laid off workers

> to reduce expenses, so that expenses would not exceed revenues. But it is a virtual truism that companies strive to ensure that expenses do not exceed revenues, and that laying off workers reduces expenses. For purposes of a TAA analysis, the salient question is "why?": Why were revenues down? For example, were lower revenues attributable in part to increased imports?
>
> *See also* C.A.R. 55 (internal agency memorandum documenting investigation pursuant to Workers' request for reconsideration, stating simply that "BMC is experiencing global reduction in workforce, due to low earnings").

Adding insult to injury, the agency's investigation conducted in response to the Workers' request for reconsideration was little more than a rubber-stamp of its initial denial. The Labor Department's reconsideration consisted-in toto-of a single phone conversation with BMC's Senior Manager for Human Resources (the same company official who had responded to the agency's initial questions). That conversation was in turn documented by the agency investigator in a memorandum that consisted of a total of five sentences, in a mere five lines of text. C.A.R. 55.[FN33]

> FN33. In contrast to the initial investigation (where the Labor Department asked only the most basic of questions-see note 30, above), at least the agency investigator handling the Workers' request for reconsideration posed some specific questions addressing the criteria that the Labor Department was then applying in TAA cases involving the software industry. *Compare* C.A.R. 36-37 (BMC's responses to agency questions in course of initial investigation) *with* C.A.R. 55 (indicating that, in reviewing Workers' request for reconsideration, agency investigator inquired whether BMC software was "recorded on media disks, ... mass-produced ... [or] sold off-the-shelf").

The Labor Department's investigation in response to the Workers' request for reconsideration was also tainted by the same methodological flaws that plagued the agency's initial investigation. Thus, for example-notwithstanding the fact that the Workers' request for reconsideration insisted that BMC "does produce an article or articles in the form of products," and even though the Workers quoted language from the BMC website referring to "products" and provided the agency with cites to locations on the BMC website where company products are sold-the Labor Department investigator accepted at face value the BMC official's statement that no products were manufactured by the company. *Compare* A.R. 53 *with* C.A.R. 55.

Similarly, although the Workers' request for reconsideration reiterated that BMC production was being shifted "offshore," and although the Workers' TAA petition had included documentation that appeared to support such allegations, the Labor Department investigator nevertheless accepted without question the BMC official's statement that "[t]here were no job transfers abroad." [FN34] *Compare* A.R. 2-3, 5-32, ***1328** 53 *with* C.A.R. 55.[FN35]

> FN34. It is of little moment that the Labor Department ultimately determined that "there was no shift in production, for TAA purposes."*See*69 Fed.Reg. at 76,783. What is significant is that, until the Workers filed the instant appeal, the Labor Department made no attempt to reconcile (and, indeed, failed even to acknowledge) the inconsistencies between BMC's statements to the agency and the information supplied by the Workers. If the agency had recognized-and sought to explore and resolve-this and some of the other apparent discrepancies between the information provided by the Workers and that provided by the company, the agency would have been alerted to the fact that BMC's Senior Manager for Human Resources was a less than reliable source.
>
> FN35. As indicated in notes 20 and 26 above, the Workers' request for reconsideration further alleged for the first time that BMC products, and product components, were being imported to replace those historically produced at BMC's Houston facility. However, the Labor Department made no attempt to investigate that allegation until after this action had

been filed. *Compare* A.R. 53 *with* C.A.R. 55 *and* A.R. 56-59.

Only after this action was filed and the voluntary remand granted did the Labor Department begin to seriously probe the merits of the Workers' TAA petition, pressing BMC (for the first time) to "provide detailed answers" supplying the "accura[te] and complete[ ]" information needed for the agency to "conduct a comprehensive investigation" of the Workers' claims (*see* S.A.R. 38-39)-information that was at the time still so conspicuously absent from the agency's files. Even a cursory review of the administrative record here makes it clear that the Labor Department could-and should-have elicited the necessary information much earlier, by scrutinizing the company's statements, seeking greater specificity and clarification, and reconciling the obvious inconsistencies in the evidence before the agency.

B. *The Labor Department's Over-Reliance on Employer-Provided Information*

In its initial investigation of the Workers' petition, the Labor Department asked BMC the "ultimate question":

Do the workers in BMC Software, Inc., Houston, TX ... produce an article of any kind or were they engaged in employment related to the production of an article? If workers do produce an article, please explain, and what is the product? C.A.R. 36-37.[FN36]

In effect, the agency sought to delegate to BMC's Senior Manager for Human Resources the power to decide the Workers' TAA petition. But, "it is Labor's responsibility, not the responsibility of the company official, to determine whether a former employee is eligible for benefits." *Federated Merch.*, 29 CIT at ----, 2005 WL 290015 at * 6 (citation omitted).

FN36. The Labor Department thus failed to question BMC about the specific criteria that the agency was assertedly applying at the time in cases such as this-*i.e.*, whether the company's software is mass-replicated on physical media (such as CDs, tapes, or diskettes) and whether it is widely marketed and commercially available (*e.g.*, packaged for "off-the-shelf" sale). *Compare IBM I*, 29 CIT at ----, 387 F.Supp.2d at 1351 (because agency obviously knows "the sometimes esoteric criteria" for TAA certification-"and the affected workers do not"-"it is incumbent upon Labor to take the lead in pursuing the relevant facts").

Accordingly, the Labor Department cannot rely on employers' blanket assurances that workers were, or were not, engaged in "production." *IBM I*, 29 CIT at ----, 387 F.Supp.2d at 1351-52 (Labor Department erred in "effectively substitut[ing] the [company official's] opinion for its own inquiry into whether the products produced ... constituted 'articles' for the purpose of [the] TAA statute"); *IBM*, 29 CIT at ---- & n. 25, ----, 403 F.Supp.2d at 1329-31 & n. 25, 1336 (Labor Department "may not rely on the legal conclusions of others as a substitute for its own analysis of the relevant facts"; agency "cannot simply adopt as its own the legal conclusions of employers," but must instead "reach its own conclusions, based on its own thoughtful, thorough, independent analysis of all relevant record facts"; "agency may not rely on conclusory assertions by company officials-particularly not as to 'ultimate facts' and legal determinations entrusted to the agency, and particularly not where those ***1329** conclusory assertions are contradicted by detailed, specific statements made by the [petitioning workers] under penalty of perjury"); *EDS I*, 28 CIT at ----, 350 F.Supp.2d at 1292-93 (in relying on company official's statement that company "did not produce articles, but provided computer related services," Labor Department improperly "substituted one ... employee's opinion that the company did not produce 'articles' for [the agency's] own legal inquiry"); *Ericsson I*, 28 CIT at ----, 2004 WL 2491651 at * 7 (agency erred in relying on company official's "essentially legal conclusion" that workers *"[did] not produce a product!"*).[FN37]

FN37. *See also Ameriphone*, 27 CIT at ----, 288 F.Supp.2d at 1359 (*citing Marathon Ashland I*, 26 CIT at 744-45, 215 F.Supp.2d at 1352-53 (Labor Department's reliance on employer's conclusory assertions concerning "production" constituted impermissible abdication of agency's duty to interpret TAA statute and to define terms used in it)).

Indeed, to the contrary, the Labor Department has an *affirmative obligation* to conduct its own independent "factual inquiry into the nature of the work

performed by the petitioners" to determine whether or not that work constituted "production." *Ameriphone*, 27 CIT at ----, 288 F.Supp.2d at 1359 (*citing Chevron I*, 26 CIT at 1284, 245 F.Supp.2d at 1327-28 (*quoting Former Employees of Shot Point Servs. v. United States*, 17 CIT 502, 507 (1993))).

Nor can the Labor Department rely on the unverified statements of company officials in the face of factual discrepancies in the record, as it did in this case. *See generally Former Employees of Marathon Ashland Pipe Line, LLC v. Chao*, 370 F.3d 1375, 1385 (Fed.Cir.2004) (ruling that the Labor Department is entitled to base TAA determinations on statements of company officials "if the Secretary *reasonably* concludes that those statements are creditworthy" and if the statements "are not contradicted by other evidence"; but-where there is a conflict in the evidence-the Labor Department is "precluded ... from relying on the representations by the employer" and is required to "take further investigative steps before making [its] certification decision") (emphasis added); *IBM*, 29 CIT at ----, ----, 403 F.Supp.2d at 1330-31, 1336 (Labor Department cannot "rely on evidence which is fundamentally at odds with other record evidence (at least not without reconciling discrepancies)"; agency cannot "accept at face value information provided by a source where either (a) that information is contradicted by other evidence on the record, or (b) there is some other reason to question the veracity of the information or the credibility of the source").[FN38] *Cf. Int'l Molders and Allied Workers' Union*, 643 F.2d at 31-32 (sustaining agency reliance on unverified employer response absent "objective circumstances ... suggesting that the company gave a less than truthful response" and absent any indication "that the company would have financially benefitted from the denial of certification"); ***1330***Former Employees of Gateway Country Stores LLC v. Chao*, 30 CIT ----, ----, 2006 WL 539129 at * 11 (2006) (Labor may reasonably "rely upon information supplied by a company official where that information is not disputed by either party or, if there is a dispute, if Labor conducts an adequate investigation into the reliability of that information") (citations omitted).

FN38. Thus, statements "that are inconsistent, uncorroborated, not entirely based on personal knowledge, and possibly biased do not constitute substantial evidence." *Former Employees of Tyco Toys, Inc. v. Brock*, 12 CIT 781, 782-83 (1988). *See also IBM*, 29 CIT at ---- n. 27, 403 F.Supp.2d at 1332 n. 27;*Ameriphone*, 27 CIT at ---- n. 8, 288 F.Supp.2d at 1359 n. 8;*Chevron I*, 26 CIT at 1283 n. 9, 245 F.Supp.2d at 1326 n. 9 (and cases cited there); *Former Employees of Pittsburgh Logistics Sys., Inc. v. U.S. Sec'y of Labor*, 27 CIT ----, ----, 2003 WL 716272 at *6 (2003) ("*Pittsburgh Logistics I*") (*citing Former Employees of Shaw Pipe v. U.S. Sec'y of Labor*, 21 CIT 1282, 1289, 988 F.Supp. 588, 592 (1997)); *Former Employees of Oxford Auto, U.A.W. Local 2088 v. U.S. Dep't of Labor*, 27 CIT ----, ---- & n. 14, 2003 WL 22282370 at * 5 & n. 14 (2003) ("*Oxford Auto I*") (and cases cited there); *Sun Apparel I*, 28 CIT at ----, 2004 WL 1875062 at * 8.

In the case at bar, as discussed in section I.B above, BMC's Senior Manager for Human Resources stated unequivocally that BMC software is not "recorded on media disks," nor is it "mass-produced" or "sold off-the-shelf," when asked by the Labor Department investigator reviewing the Workers' request for reconsideration. *See* C.A.R. 55. The BMC official also denied that any jobs had been transferred abroad. *Id.* In fact, all of those statements were patently and demonstrably false. It is impossible to definitively discern from the record here whether or not she knew that the statements were false at the time she made them-although, candidly, it strains credulity to suggest that the Senior Manager for Human Resources of a major multinational corporation could be so ignorant of such basic information about the nature of her employer's business, much less the overall status of the company's workforce at its facilities here at home in the U.S. *versus* abroad.[FN39]

FN39. It is astonishing that, as late as the date of BMC's return of the Confidential Data Request (in the course of the remand proceedings), BMC's Senior Manager for Human Resources was *still* maintaining that BMC "create[s] software solutions not tangible products." C.S.A.R. 92.

Other statements in BMC's response to the Confidential Data Request are equally

> mystifying. Incredibly, asked whether there had been layoffs, BMC's Senior Manager for Human Resources checked "unknown." C.S.A.R. 92. In response to a request for the number of production workers employed in 2002 *versus* 2003, she again stated that "BMC delivers software solutions not a tangible product."C.S.A.R. 93. Elsewhere, she reiterated that "BMC creates software solutions not tangible products such as televisions or computer hardware." C.S.A.R. 135. But she went on to concede that BMC does "reproduce software on tangible media in the form of CDs, tapes and paper at the subject plant" (Houston, TX). *Id. See also* C.S.A.R. 157 (same).

Each of the false statements made by BMC's Senior Manager for Human Resources was at odds with information that the Workers had provided to the Labor Department. Yet the agency never once contacted the Workers to attempt to reconcile the discrepancies, or to solicit information from them (on this, or any other, subject)-not as part of the agency's initial investigation, and not even in response to the request for reconsideration. There can be no doubt that-if the Labor Department had bothered to ask the Workers whether BMC's software is mass-replicated on physical media and is widely marketed and commercially available (*e.g.*, packaged for "off-the-shelf" sale)-the Workers would have provided to the agency the same photos of shrink-wrap software that they appended to their Complaint filed with the court.[FN40] But the Labor Department***1331** never asked, and instead accepted as gospel truth the unsubstantiated representations of the BMC human resources official.

> FN40. The Labor Department emphasizes that, until the Complaint was filed, it had not seen the Workers' "photocopied pictures of [BMC's] packaged software." 69 Fed.Reg. at 76,783. According to the Labor Department, it was those photos that caused the agency to "identif[y] the need to resolve the apparent conflict between information provided by the petitioners and that provided by the employer," resulting in the agency's request for a voluntary remand. *Id.*
>
> As noted immediately above, however, the Labor Department would have had access to the photos earlier, had it bothered to contact the Workers in the course of either its initial investigation or its investigation in response to the Workers' request for reconsideration. Even more to the point, as discussed in note 24 and elsewhere, the record before the agency was replete with "apparent conflict[s] between information provided by the petitioners and that provided by the employer" even *without* the photos-as the Government itself conceded in requesting a voluntary remand from the Court. *See* [Defendant's] Second Amended Motion for Voluntary Remand (July 6, 2004). But those conflicts were either ignored or overlooked by the agency, until the Workers sought recourse in this forum.

As section I.A above observes, the methodology used to conduct TAA investigations is-as a general principle-committed to the sound discretion of the agency. But it is difficult to fathom why Labor Department investigators continue to rely so heavily on employers, virtually to the exclusion of petitioning workers. A review of the administrative records in TAA cases filed with the court reveals that agency investigators only relatively rarely contact petitioning workers to seek additional information, documentation, or clarification.[FN41] In contrast, investigators seem almost gullible in their willingness to accept at face value virtually *anything* an employer says-typically without even confronting the employer with other, conflicting information provided by petitioning workers (or sometimes the employer itself).[FN42]

> FN41. In those rare cases where Labor Department investigators actually have contacted petitioning workers, it has generally been only after an initial negative determination has been rendered, and the workers have sought reconsideration or have filed a challenge in court. *See, e.g., EDS I*, 28 CIT at ----, 350 F.Supp.2d at 1285 (noting that, in response to request for reconsideration, agency investigator contacted one of the petitioning workers). *But see IBM I*, 29 CIT at ----, ----, 387

F.Supp.2d at 1348, 1350 (indicating that agency had some minimal contact with two of the petitioning workers in course of initial investigation).

FN42. *See Harper's Magazine* at 63 (noting that, notwithstanding significant employer incentives to be less than forthcoming about the circumstances surrounding layoffs, "the Labor Department routinely privileges information from the company over information from workers").

In a nutshell, the Labor Department views employers as presumptively reliable sources, and treats any information that they provide as though it "trumps" information provided by petitioning workers. The agency maintains that an employer has no reason to lie, and has "[no] interest in the outcome of [a TAA case] that might ... be[ ] adverse to its former employees." *Former Employees of Barry Callebaut v. Chao*, 357 F.3d 1377, 1381 (Fed.Cir.2004).[FN43]

FN43. *See also, e.g., Int'l Molders and Allied Workers' Union*, 643 F.2d at 31-32 (sustaining agency reliance on unverified employer response absent "objective circumstances ... suggesting that the company gave a less than truthful response" and absent any indication "that the company would have financially benefitted from the denial of certification"); *Chevron I*, 26 CIT at 1282 n. 8, 245 F.Supp.2d at 1325 n. 8 (noting, then rejecting, Government's claim that there was "no evidence that [company] officials were uncooperative or less than forthright during Labor's investigation").

It is telling that, for example, in *Chevron*, one current company official feared retaliation by his employer for the assistance he rendered to the petitioning workers. *See Chevron I*, 26 CIT at 1272, 245 F.Supp.2d at 1320. *See also, e.g., IBM I*, 29 CIT at ----, 387 F.Supp.2d at 1350-52 (employer apparently failed to complete and return agency TAA questionnaire, and was otherwise "very dilatory"; Defendant's Consent Motion for Voluntary Remand (Oct. 7, 2003), *filed in Former Employees of Mellon Bank, N.A.*, Court No. 03-00374) (expressing concern as to employer responsiveness to agency inquiries for additional information); *Whitin Machine Works*, 554 F.2d at 500 (expressing incredulity and describing as "bizarre" employer's "attempt[ ] to terminate [a TAA investigation] which could result in substantial benefits to many of its present and former employees").

Au contraire. The Labor Department's position on the reliability of company ***1332** statements is simplistic and naive, at best-for, just as the Labor Department seems to impute to *petitioning workers* a motivation to stretch the truth in an effort to secure TAA benefits, so too *employers* have certain inherent incentives to be less than candid and fully forthcoming as well. *See, e.g., Tyco Toys*, 12 CIT at 782-83 (remand ordered, based on court's finding that sole source on which agency relied for information evidenced "a certain bias against provision of trade adjustment funds to the claimants").

Particularly in today's social and political climate-a time when issuing pink slips, padlocking factory doors, or outsourcing production to India or China may trigger a consumer boycott, make a company the lead story on "Lou Dobbs Tonight," [FN44] or get the company's chief executive branded a "Benedict Arnold CEO" [FN45]-some employers may be understandably reluctant to acknowledge layoffs and the reasons for them. Thus, in *Bell Helicopter,* for example, the court properly criticized the Labor Department's reliance on information provided by company officials, emphasizing that:

FN44. The recent *Harper's Magazine* exposé of the Labor Department's administration of the TAA program questioned the agency's blind reliance on information supplied by employers "despite the fact that many executives, *fearing nothing so much as the wrath of Lou Dobbs,* are less than eager to admit to shipping work overseas." *Harper's Magazine* at 63 (emphasis added).

For months, one of the most popular recurring segments on CNN's "Lou Dobbs Tonight"-titled "Exporting America"-

covered issues such as free trade agreements, the U.S. trade deficit, and "outsourcing," shining an often-unwelcome spotlight on U.S. corporations reported to be outsourcing jobs.

The TV program's website (at www. cnn. com) includes a link to transcripts of past shows (including segments on topics ranging from "Does Job Retraining Work?" and "Growing Backlash Over Outsourcing," to "Small and Medium-Size Business Now Exporting American Jobs Overseas"). At one point, the website also featured a link captioned "Exporting America: List of companies exporting jobs." (BMC Software appears on the list, which is now archived at http:// www. cnn. com/ CNN/ Programs/lou.dobbs.tonight/popups/exporting.america/content.html (last visited Aug. 31, 2006).) *See generally* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 821-22 n. 110 (discussing Lou Dobbs' focus on "Exporting America").

See also GAO Report 04-1012 at 16-17 (reporting that trade-affected companies are sometimes "unwilling" to provide lists of workers affected by layoffs).

FN45. In the course of the 2004 Presidential campaign, Democratic nominee Senator John Kerry famously denounced as "Benedict Arnold CEOs" corporate executives who outsourced manufacturing operations, "tak[ing] American jobs and money overseas." *See, e.g.*, Hon. John Kerry, Town Hall Meeting, Vinton, IA (Jan. 13, 2004) (transcript available at 2004 WL 62479).

[Both company officials] had serious adverse interests to acknowledging or confirming that the job losses were due to the fact that [the firm] could pay Canadians less than Americans ... [and] ... intended to do just that. *The public relations implications alone were enough to cast a cloak of suspicion over [the firm's] responses, both in terms of veracity and completeness.*
Bell Helicopter, 18 CIT at 326 (emphasis added).[FN46]

FN46. No employer relishes headlines like "Shipped Out-The Story of How AT & T Moved 3,500 Workers to a New 'Career' at IBM-Knowing It Wouldn't Last."*See IBM I*, 29 CIT at ----, 387 F.Supp.2d at 1347 (*quoting* headline of news article in *The Star Ledger*, August 25, 2002). Similarly, the record in another, unrelated IBM case included a *New York Times* news clipping reporting on a conference call in which "two senior I.B.M. officials told their corporate colleagues around the world ... that I.B.M. needed to accelerate its efforts to move white-collar ... jobs overseas *even though that might create a backlash among politicians and its own employees.*" *See IBM*, 29 CIT at ---- n. 26, 403 F.Supp.2d at 1332 n. 26.

See also "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 821-22 n. 110 (*citing* another "example of the bad public relations associated with outsourcing on a local level"); *id.* (emphasizing need for Labor Department to take measures to ensure "that the [former employer's] answers [to agency requests for information] are not tinged with concern for the company's public image," particularly since "some companies have been wary to be seen as contributing to the 'outsourcing' trend").

***1333** Similarly, employers have an incentive to downplay the circumstances surrounding layoffs if they fear that the publicity that may accompany a full-blown TAA investigation (and possible eventual certification) may be exploited by their competitors, or may negatively affect their stock prices or financial ratings, or may have an adverse impact on their relationships with their suppliers or their "downstream" finishers, by signaling that they may be having financial difficulties. Thus, for example, a company subject to a TAA investigation may harbor concerns that, if its suppliers become skittish about the company's solvency, they may impose more stringent payment terms on the company, refuse to extend credit to it, or cease doing business with it altogether. And a company's "downstream" finishers may begin to contract with other sources of work to

replace the stream of work historically generated by the company, if they suspect that the company may be beginning to scale back production or preparing to close its doors entirely.[FN47]

FN47. *See, e.g.*, GAO Report 04-1012 at 24-25 (reporting that "some trade-affected employers are reluctant ... to provide the names of suppliers that may also be affected by their shutdown or reduced production. For example, [some state] officials ... told [GAO] that employers are sometimes hesitant to share this information because *they do not want their suppliers to know that they are having financial difficulties.*") (emphasis added). *See also id.* at 4 (noting that "trade-affected companies may be reluctant ... to provide lists of firms that supply them with component parts").

In other cases, company officials simply may not understand that the TAA program differs from the unemployment compensation system, where an employer has a clear financial stake in minimizing the amount paid to former employees on unemployment claims.[FN48] Or companies may lack ready access to all the information that the Labor Department seeks.[FN49] In ***1334** some cases (and perhaps this case), the company officials who respond to the Labor Department's inquiries may not intend to mislead the agency, but instead may simply lack the requisite knowledge of the company's product lines, markets, and operations. *See, e.g., Sun Apparel I*, 28 CIT at ----, 2004 WL 1875062 at * 7 (lambasting Labor Department for relying on information provided by employer's human resources manager which was "inconsistent, contradictory, and *evidence[d] an apparent lack of comprehension of the full array of operations, tasks, and activities"* of company personnel) (emphasis added); *IBM*, 29 CIT at ----, 403 F.Supp.2d at 1322 (criticizing agency for relying on information provided by company official who "later disclaimed 'any firsthand knowledge of daily work activities of the [petitioning workers],' and recommended that 'someone else at [the company] should be contacted for additional information' "); *Pittsburgh Logistics I*, 27 CIT at ----, 2003 WL 716272 at * 7 (noting that "[t]he Court does not presume that the Employment Development Specialist ... located in Rochester [New York] who responded to the [agency] investigator's questions about the petitioners was 'in a position to know' the extent of the petitioners' jobs in Independence [Ohio]").[FN50]

FN48. Employers typically are familiar with the unemployment compensation system, and may assume (wrongly) that the TAA system operates in a similar fashion. The size of an employer's annual unemployment tax assessment is based, in significant part, on the amount that has been paid out by the state to the company's former employees on unemployment compensation claims. Employers thus have a very real financial incentive to seek to minimize the payment of unemployment compensation to their former employees. In contrast, an employer pays no part of the assistance awarded to former employees under the TAA system. *Cf.* Jerome Hanifin, "A Short History of a TAA Case: *Former Employees of Oxford Automotive v. U.S. Department of Labor," Litigating Trade Adjustment Assistance Cases Before the United States Court of International Trade*, Customs & International Trade Bar Association and American Bar Association seminar, Princeton Club, New York, NY, April 19, 2005, at 13 ("Hanifin") ("Even though certification for TAA benefits entails no added cost to the employer, in all too many cases the employer has provided suspect or outright false information to Labor."); IBM, 29 CIT at ---- n. 37, 403 F.Supp.2d at 1336 n. 37 (directing that, "[t]o help ensure the completeness and accuracy of information obtained on remand, the Labor Department shall expressly advise and assure all its contacts at [the former employers] that-*unlike regular unemployment compensation*, for example-the TAA certification of the [petitioning workers] would involve no expense whatsoever on the part of the companies").

FN49. *See, e.g.*, GAO Report 04-1012 at 4 ("trade-affected companies may ... find it difficult to provide lists of firms that supply them with component parts"), 16-17 (reporting that trade-affected companies are sometimes "unable" to provide lists of

workers affected by layoffs), 24 ("some trade-affected employers ... find it difficult to provide the names of suppliers that may also be affected by their shutdown or reduced production"), 25 ("smaller employers may find it difficult to provide information on their suppliers or finishers because they do not have this information readily available").

FN50. In some cases, the problem may lie (at least in part) with the Labor Department's usual practice of using a generic, "one-size-fits-all" Business Confidential Data Request standard form questionnaire to attempt to elicit the requisite information from employers in TAA cases. *See generally* S.A.R. 43-47 (blank Business Confidential Data Request questionnaire form, sent to BMC by the Labor Department in the course of the remand proceedings in this case); "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 818-19 (criticizing Labor Department's employer questionnaire process).

> Because the agency's standard form questionnaire is not tailored to any specific *industry* (much less the particular *company* at issue in a particular case), it is difficult not to sympathize with company officials who are confronted with the challenge of trying to complete the form as best they can.
>
> Of course, the Labor Department could undertake to develop specialized questionnaires for particular industries. *Cf.* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 823-26 (proposing that Labor Department convene inter-disciplinary working groups for various major industries, to-*inter alia*-develop industry-specific definitions of "production"). However, particularly if the Labor Department continues to use a generic standard form questionnaire for all employers, it is incumbent on the agency to follow up on companies' responses, to ensure that the information on which agency determinations are based is accurate, and has not been distorted or misinterpreted due to the agency's reliance on a very generic form questionnaire. *See generally United Glass & Ceramic Workers v. Marshall*, 584 F.2d 398, 404-05 (D.C.Cir.1978) (noting that TAA program requires Labor Department "to investigate a wide range of industries," and that agency's investigative techniques must necessarily "vary with the structure of the industry, the available sources of information, and the number of other causative factors at work").

In sum, for all these reasons and more, there is no apparent rational basis for treating information supplied by employers as inherently and necessarily more reliable and authoritative than that provided by petitioning workers-particularly where the employer's information is unsworn, unverified, and uncorroborated, or where it conflicts with information submitted by the petitioning workers.[FN51]

> FN51. In the interests of accuracy and efficiency, Labor Department investigators would be well advised to contact both the employer *and* the petitioning workers in the course of the agency's initial investigation. And, of course,
>
> > investigators are obligated to seek clarification to resolve any apparent conflicts or discrepancies in the record before them.
> >
> > Moreover, while it may be true-as the Labor Department has argued elsewhere-that "there is no requirement that any statement upon which Labor relies must be verified in accordance with the requirements of 28 U.S.C. § 1746," there can be little doubt that the information provided to the agency generally would be more accurate and more complete if respondents (companies and petitioning workers alike) were required to file their submissions under oath. *See Barry Callebaut*, 357 F.3d at 1381. *See also id.* at 1383 (sustaining Labor Department's claim that workers were not entitled to TAA certification, largely on the strength

of sworn employer affidavits submitted to the agency, which-the appellate court emphasizes-included solemn oath acknowledging liability for perjury; "those affidavits were sufficiently trustworthy to constitute substantial evidence").

Indeed, company officials and displaced workers alike may be held liable for material false statements made to the Labor Department in the context of a TAA investigation *whether those statements are oral or in writing, and even if they are not made under oath. See*18 U.S.C. § 1001 (subjecting to fine and/or imprisonment for up to five years anyone who "in any matter within the jurisdiction of the executive, legislative, or judicial branch of the Government of the United States, knowingly and willfully ... makes any materially false, fictitious, or fraudulent statement or representation"); *United States v. Krause,* 507 F.2d 113, 117 (5th Cir.1975) (federal material false statements statute applies "to oral as well as written statements and unsworn as well as sworn statements"); *IBM,* 29 CIT at ----, n. 37, 403 F.Supp.2d at 1336 n. 37 (*citing* federal material false statements statute at 18 U.S.C. § 1001, and directing that-to "help ensure the completeness and accuracy of information obtained on remand"-the Labor Department "shall caution all contacts that they will be held personally accountable by the Court for all information that they provide in the course of the agency's investigation, whether their statements are oral or in writing, and even if they are not made under oath").

The reliability of information depends, in equal measure, both on the knowledge and authority of the source of the information, and on that source's honesty. If the Labor Department believes that BMC's Senior Manager for Human Resources actually did not know that her statements were false, it is entirely unclear (based on its experience in this and many other such cases) why the agency persists in treating employers' human resources executives as *authoritative, knowledgeable* sources in TAA investigations. If-on the other hand-the Labor Department believes that BMC's Senior Manager for Human Resources intentionally prevaricated, it is not only unclear why the agency continues to treat employers' human resources executives as presumptively *honest* sources, but it is also unclear why the agency apparently routinely permits them to lie with impunity. *See, e.g.,* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 820-21 & n. 106 (criticizing Labor Department's pattern of relying on companies' human resources personnel, observing that "the Human Resources department appears to be [the Labor Department's] primary source in investigations," and emphasizing that "[i]n most cases, the data they provide is lacking in some respect"); *Sun Apparel I,* 28 CIT at ----, 2004 WL 1875062 at * 5 (agency sought to defend its reliance on information provided by employer's Human Resources manager, based on official's "credibility" and "position within the company").

In any event, it is possible that, had the Labor Department required BMC's Senior Manager for Human Resources to submit her responses to the agency's questions under oath, she would have answered truthfully and accurately, or-if she were uncertain as to the answers-she would have referred the agency's inquiries to some other company official for their response. (It is interesting to note that, in its initial contact with BMC after the Court remanded the case to the agency, the Labor Department pointedly admonished that "the company official who signs the CDR [Confidential Data Request questionnaire response] *will be responsible for the accuracy and completeness of the information* contained therein." *See* S.A.R. 39 (emphasis added). That warning-as much as anything-may be the reason that this matter was kicked up to the office of BMC's General Counsel,

and finally got the attention that it deserved. *See* C. S.A.R. 50 (letter from BMC's Senior Legal Counsel, assuring Labor Department that "BMC Software is very interested in cooperating" with agency investigation).)

Certainly a referral to the U.S. Attorney for potential prosecution under 18 U.S.C. § 1001 of a corporate executive for material false statements made to the Labor Department in the course of a TAA investigation would get the attention of other employers elsewhere across the country, and send a strong message to company officials everywhere about the importance of responding to the agency's inquiries accurately and completely.

Ultimately, of course, it falls to the Labor Department to decide how best to ensure the reliability of the information on which its TAA determinations are based. *See generally Former Employees of CSX Oil & Gas Corp. v. United States*, 13 CIT 645, 651-52, 720 F.Supp. 1002, 1008 (1989); *Hawkins Oil & Gas II*, 17 CIT at 130, 814 F.Supp. at 1115.

The agency may-for example-choose in the future to channel its inquiries to employers through the companies' general counsels' offices (which, in this post-Enron era, are likely to be uniquely sensitive to the importance of accuracy and completeness in responding to federal investigations). *See generally* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 820-22 (recommending that Labor Department "direct all questionnaires to in-house counsel, or if there are none, to the company's outside legal counsel," theorizing that agency could then "rely on the standards of legal professional ethics in demanding that information be provided in a complete and accurate manner"), 820 n. 106 (observing that "the Human Resources department appears to be [the Labor Department's] primary source in investigations," but that "[i]n most cases, the data they provide is lacking in some respect"); *IBM I*, 29 CIT at ----, ----, 387 F.Supp.2d at 1348, 1350-52 (noting that agency investigator contacted company's in-house counsel).

Or the agency may choose to caution all respondents (including company officials and petitioning workers alike) that they may be subject to prosecution for material false statements; or the agency may choose to require that all information provided to it be submitted under oath. *See, e.g.*,U.S. Department of Agriculture, Form FSA-229, "Application for Trade Adjustment Assistance (TAA) for Individual Producers" (Ag-TAA Application) (cautioning Ag-TAA applicants that, *inter alia*,"[t]he provisions of criminal and civil fraud statutes, including 18 USC 286, 287, 371, 641, 651, 1001; 15 USC 714m; and 31 USC 3729, may be applicable to the information provided"); "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 821 n. 109 (*citing* source "suggesting as an improvement to TAA that [the Labor Department] demand 'accurate information' from corporate management"). *See also*19 U.S.C. § 2321 (authorizing Labor Department to "subpena the attendance of witnesses and the production of evidence necessary ... to make a determination" on a TAA petition, and authorizing judicial enforcement of such subpoena); *Whitin Machine Works*, 554 F.2d 498 (upholding subpoena issued in TAA investigation by Labor Department, compelling employer to produce to agency "sales, production, and inventory data for three years, separately identified by product; employment data, including average weekly and monthly employment; data as to quantity and value of [employer's] imports, identified by product lines; and the percentage of production and sales accounted for by [employer's] exports").

Or the agency may choose to verify all information on which it relies by seeking independent corroboration. *See, e.g., Sun*

Apparel I, 28 CIT at ----, 2004 WL 1875062 at * 8 (castigating Labor Department for agency's failure "to require any documentary or other evidence to support the HR manager's assertions, to verify the company's responses, or to otherwise ensure the truthfulness of the HR manager's claims" which conflicted with information provided by petitioning workers); "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 822-23 (asserting that agency investigations should be required to include, in addition to information supplied by employer, "objective, third party evidence" such as "trade-specific publications, trade data for an industry, consultations with industry experts, etc."). *But cf. Int'l Molders and Allied Workers' Union*, 643 F.2d at 31-32 (sustaining agency reliance on unverified employer response absent "objective circumstances ... suggesting that the company gave a less than truthful response" and absent any indication "that the company would have financially benefitted from the denial of certification").

Or the agency may devise other suitable means to protect the integrity of its process. What the Labor Department emphatically *may not* do is ignore or dismiss the statements of petitioning workers while treating as gospel the conflicting, unsworn, and uncorroborated statements of company officials (who may not even necessarily be speaking to matters within their competence).

1336** The court's reach may or may not extend to employers who provide incomplete, false, or misleading information to the Labor1337** Department; but clearly the Labor Department is well within its grasp. And the agency's persistent failure to verify the accuracy of the information on which it relies-as well as its pattern of turning a blind eye to obvious inconsistencies and discrepancies in the record before it-is beginning to verge on contempt for administrative and judicial process, and does a grave disservice to the hardworking men and women of this country.[FN52]

FN52. The persistent problems that the Court of International Trade has identified in recent years apparently are nothing new.

More than a decade ago, an audit of the TAA program conducted by the U.S. General Accounting Office (now known as the "Government Accountability Office") ("GAO") concluded that "[p]roblems in the TAA certification process raise questions about how Labor determines worker eligibility. Flaws in Labor's petition investigations ... may result in petitions not being filed or erroneous decisions to approve or deny assistance to workers." GAO/HRD-93-36, "Dislocated Workers: Improvements Needed in Trade Adjustment Assistance Certification Process," Oct. 1992, at 3 ("GAO Report 93-36").

The GAO audit found that "flawed investigations were conducted in 63 percent of the petitions filed" during the period under review, and that "[a] s a result of these flaws, workers entitled to TAA benefits may have been denied needed assistance." *Id.*

Of particular moment here, the GAO identified as a "major" problem the Labor Department's practice of relying on "incomplete, inaccurate, or unsubstantiated" information provided by employers. *Id.* at 5. The GAO report explained:

For example, in one case, Labor relied on unsubstantiated information regarding the parent company's import practices and denied the petition. Only after union officials intervened on behalf of the workers did Labor learn that the company was importing goods from its foreign operation. As a result, Labor reversed its position and certified the workers.

Labor's reliance on unsubstantiated company testimonial evidence ... has also been questioned by the U.S. Court of

> International Trade. For example, the court remanded one case to Labor for further investigation because Labor had "... relied on questionable data including inconsistent sources, and uncorroborated and possibly biased testimony."
>
> *Id.* Incredibly, more than a dozen years after the GAO condemned the practice, the Labor Department still routinely bases its TAA certification determinations on "incomplete, inaccurate, [and] unsubstantiated" information provided by employers.

C. *The Labor Department's Failure to Consult Other Publicly-Available Sources of Information*

Even apart from the Labor Department's blind faith in information provided by employers, the agency's failure to solicit information from petitioning workers, and its willingness to ignore apparent inconsistencies in the record before it, there is yet another problem with the agency's investigations: Here, as elsewhere, Labor Department investigators failed to make use of valuable sources of information that are readily available to them.[FN53]

> FN53.*See, e.g.,* Letter from the Court to Counsel for Defendant (March 19, 2004), *filed in Former Employees of Paradise Fisheries v. United States,* Court No. 03-00758 (criticizing Labor Department for six-month delay in TAA certification of workers, which resulted from failure of agency personnel to perform simple search of online version of Federal Register); *Ericsson I,* 28 CIT at ----, 2004 WL 2491651 at * 5 (faulting Labor Department for failure to review information on corporate website of petitioning workers' former employer).

For example, the Labor Department's standard form Petition for Trade Adjustment Assistance asks that petitioning workers supply the web address for their former employer. The Workers here complied with that request. *See* A.R. 2 (providing company web address, www. bmc. com).

Agency investigators apparently never consulted the company's website, however. Had they done so, they would have discovered***1338** that the website states that BMC's "SIC" code-"Standard Industrial Classification" code-is 7372, which is the classification code for "*Prepackaged* Software." (Emphasis added.) [FN54] The agency investigators also would have been able to access BMC's Form 10-K for the Fiscal Year Ended March 31, 2003 (filed in mid-June 2003)-the most recent report as of the date of the Workers' termination. That ***1339** report describes the work of BMC's Houston facility as "manufacturing," and explains that the company sells its software both "in object code form" and "on a shrink wrap basis." [FN55] Of course, the fact that BMC sells "prepackaged software" in "shrink wrap form" was critical to the merits of the Workers' TAA petition, under the criteria that the Labor Department was applying at the time.

> FN54.*See, e.g.,* BMC website, "BMC Software Vendor Fact Sheet" (identifying BMC's SIC code as 7372).
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> As noted in section I.B above, the internal agency memorandum documenting the Labor Department's initial investigation in this case indicates that BMC's SIC code is 7371-the code for "Computer Programming Services." *See* C.A.R. 42-43. However, there are several problems with that statement.
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> First, the Labor Department's statement has no apparent basis in the administrative record.
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> The source of the information simply is not cited.
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> Second, as this note details, the accuracy of the Labor Department's statement is subject to question. Whatever the source of the agency's information (which is not disclosed in the record), both BMC's own website and the website of the U.S. Securities and Exchange Commission identify BMC's SIC code as 7372-"Prepackaged Software." *See generally* section I.B & n. 18, *supra* (explaining SIC system). In the context of a TAA investigation the distinction between

"production of an article" and "delivery of services" may be critical.

And, third (and most importantly), not only is an employer's SIC (or NAICS) code *not determinative* in a TAA case, it is essentially *irrelevant.* Thus, for example, the Labor Department itself now has determined that the employer in this case, BMC, is engaged in the production of an article-even though both SIC codes 7371 and 7372 are, in fact, "services" codes under the Standard Industrial Classification system. *See also Merrill Corp. II,* 29 CIT at ----, 387 F.Supp.2d at 1345 (stating that "[s]ources such as the SIC 'do not speak to the definition of the word "article" as used in the [Trade] Act, but rather to the categorization of industries for entirely other purposes,' " and that "[t]he SIC code Labor deemed applicable to [the company's] business is irrelevant" in such a situation) (*quoting Murray Engineering II,* 28 CIT at ---- n. 8, 358 F.Supp.2d at 1273 n. 8);*Murray I,* 28 CIT at ----, 346 F.Supp.2d at 1289 (holding that an employer's NAICS code is "not relevant" in a TAA case). *Cf. IBM I,* 29 CIT at ----, 387 F.Supp.2d at 1348-49 (finding that NAICS failed to address issues raised by petitioning workers).

It bears noting that the case at bar is not an isolated case. There have been discrepancies in SIC and NAICS codes in other cases as well. For example, in reaching its negative determination in *Merrill,* the Labor Department identified Merrill's SIC code as 7334-"Photocopying & Duplicating Services," a "services" code under the Standard Industrial Classification system. *See Merrill Corp. II,* 29 CIT at ----, 387 F.Supp.2d at 1345. However, the SEC's website states that the SIC code for Merrill is 2750-"Commercial Printing," which is a "manufacturing" code (*i.e.,* "Manufacturing-Printing, Publishing, and Allied Industries").

The Labor Department's use of SIC and NAICS codes in TAA cases was ill-conceived from the start. Contrary to the agency's implication, "[v]arious Federal government agencies maintain their own lists of business establishments, and assign classification codes based on their own programmatic needs." *See* "Ask Dr. NAICS" (available on website of U.S. Census Bureau). Accordingly, as the Census Bureau's website makes clear: *"There is no central government agency with the role of assigning, monitoring, or approving NAICS codes for [business] establishments.* Individual establishments are assigned NAICS codes by various agencies for various purposes using a variety of methods." *Id.* (emphasis added). A company's classification codes therefore "will vary by agency." *Id.* Indeed, "some agencies assign more than one NAICS code" to a single company, with some agencies "accept[ing] up to 5 or 10 classification codes" per company. *Id.* Moreover, "NAICS was designed ... in such as way as to allow business establishments to *self-code." Id.* (emphasis added). And, finally, "NAICS was developed specifically for the collection and publication of statistical data to show the economic status of the United States. *The NAICS categories and definitions were not developed to meet the needs of ... regulatory applications"* such as the TAA program at issue here. *Id.* (emphasis added).

FN55 *See* BMC Form 10-K, at C.S.A.R. 490-91 (stating that "[p]roduct manufacturing and distribution for the Americas are based in Houston" and in California), 493 (stating that BMC software is distributed both "in object code form" and "on a shrink-wrap basis"); *see also id.* at 488 (noting that, beginning with Form 10-K for Fiscal Year ending March 31, 2003, all of BMC's SEC filings are being posted on company website).

By regulation, the Labor Department is required "to marshal all relevant facts to make a determination" on TAA petitions. 29 C.F.R. § 90.12.[FN56] In light of that obligation, the agency's failure to avail itself of

resources such as company websites and Form 10-Ks in cases such as this is utterly incomprehensible.[FN57] Here, a few quick clicks of a computer mouse by a Labor Department investigator would have sufficed to expose the falsity of the information provided to the agency by BMC's Senior Manager for Human Resources, and would have resolved at least some of the issues central to the agency's analysis of the Workers' right to TAA certification.[FN58]http://www.westlaw.com/Find/Default.wl?rs=dfa1.0&vr=2.0&DB=118820&FindType=Y&ReferencePositionType=S&SerialNum=0304966875&ReferencePosition=822*See generally* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 822-23 (asserting that Labor Department investigations should be required to include, in addition to information supplied by employer, "objective, third party evidence" such as "trade-specific publications, trade data for an industry, consultations with industry experts, etc.," and arguing that the absence of corroboration by such "third party sources" should be deemed "prima facie evidence that [the Labor Department] did not conduct a reasonable investigation").

FN56. All references to regulations herein are to the 2003 version of the Code of Federal Regulations.

FN57. The SEC's website offers free access to the 10-K forms (which identify, *inter alia,* SIC codes) of those companies that are required to file with the agency. It is an extremely quick and easy search. A researcher simply types in the name of the subject company, presses "search," and *voila!* Up pops a menu of the complete text of the company's SEC filings from 1993 to date, available online through the agency's "EDGAR" database.

See also Hanifin at 6-7 (discussing submission of employer's Form 10-K to Labor Department in a TAA case to substantiate validity of petitioning workers' claims).

FN58. *See Oxford Auto I,* 27 CIT at ---- & n. 14, 2003 WL 22282370 at * 5 & n. 14 ("Labor erred by failing to verify the statements [of a company official] that seemed at odds with [the company's] Form 10-K") (citations omitted).

D. *The Impact of the Labor Department's Cavalier Approach to Remands*

This case is troubling enough viewed in isolation. But it is even more disturbing when it is viewed in the context of other TAA cases appealed to the court in recent years. As *Ameriphone* noted, the Labor Department's *modus operandi* increasingly is to seek a voluntary remand in TAA cases that are appealed to the court. *Ameriphone,* 27 CIT at ----, 288 F.Supp.2d at 1359.[FN59] Requests for voluntary remands have become all but routine.[FN60]

FN59.*See also* Hanifin at 3 (noting that "[i]t seems to be standard operating procedure in TAA cases for the Department of Justice attorney representing Labor to immediately ask for a voluntary remand when a case challenging a denial is filed").

FN60. The statistics reported in one analysis are striking: "From January 2001 through October 2004, seventy-four TAA appeals were filed with the Court of International Trade; in forty-two of them, lawyers for the Labor Department requested a 'voluntary remand,' apparently so that they could have more time to investigate and substantiate a case that should already have been thoroughly considered." *See Harper's Magazine* at 63. A more recent analysis of TAA cases filed with the court confirms that voluntary remands are even more common now, and-indeed-are sought in the vast majority of cases. *See* section II.E, *infra.*

***1340** Counsel for the Government have elsewhere sought to defend the agency's knee-jerk filing of motions for voluntary remand as "a reasonable and efficient opportunity for Labor to conduct further investigation as to whether the [denial of] certification ... is supported by substantial evidence."[FN61] But that reflects a curiously perverted view of the administrative and judicial processes. The Labor Department is obligated by statute to thoroughly investigate all TAA petitions and to compile complete records to support its determinations *before*

cases reach the court. And the "substantial evidence" test is to be applied *not* by the agency, but-rather-by the court.

FN61. *See* McCarthy at 14.

Moreover, there are a number of significant concerns inherent in the Labor Department's practice of routinely seeking (and, for that matter, the court's practice of reflexively granting) voluntary remands in TAA cases.

One concern is that voluntary remands effectively enable the Labor Department to paint a misleading portrait of the calibre of its investigations and the bases for its determinations. By definition, a voluntary remand affords the Labor Department an opportunity to "doctor" the record of its initial investigation, by eliciting information that the agency should have obtained previously, and then using that information to "beef up" the administrative record before the agency's determination is subjected to judicial review. By doing so, the Labor Department avoids much of the harsh criticism it would have drawn had a court reviewed the agency's determination based solely on the record developed in the initial investigation.

[5] However critical of the Labor Department the TAA case law has been to date, there can be little doubt that it would be even more blistering if-in lieu of granting agency motions for voluntary remand-the courts instead denied such requests, forced the agency to attempt to defend its determinations on the basis of the meager record compiled in the course of its initial investigations, and based their first opinions in every case solely on that record, cataloguing the flaws and deficiencies in the investigation that the agency would have sought to cure had a voluntary remand been granted.[FN62] In sum, the reported decisions of the court do not accurately reflect the Labor Department's administrative processes. Through the procedural vehicle of voluntary remands, ***1341** the agency is able to sweep much of the worst of its dirt under the rug.

FN62. As the Court of Appeals has noted, where an agency "request[s] a remand (without confessing error) in order to reconsider its previous position,"'"the reviewing court has discretion over whether to remand." *SKF USA Inc. v. United States*, 254 F.3d 1022, 1029 (Fed.Cir.2001) (citations omitted).

> Indeed, in *SKF*, the Court of Appeals expressly recognized that a remand "may be refused if the agency's request is frivolous or in bad faith":
>
> For example, in *Lutheran Church-Missouri Synod v. Fed. Communications Comm'n*, 141 F.3d 344, 349 (D.C.Cir.1998), the Court of Appeals for the District of Columbia Circuit refused the FCC's "novel, last second motion to remand," noting that the remand request was not based on a confession of error and was instead based on a prospective statement which would not bind the FCC. *See id.* The court added that *"the Commission has on occasion employed some rather unusual legal tactics when it wished to avoid judicial review, but this ploy may well take the prize."*
>
> *SKF*, 254 F.3d at 1029 (emphasis added).

Delay is another critical issue. The Government's position on the acceptability of routine requests for voluntary remands suggests that it believes that there is "no harm, no foul" inherent in such an approach. Nothing could be further from the truth. It is no answer for the Labor Department to "wait and see" whether a denial of TAA certification is challenged in the courts, and then-if it is-to seek a voluntary remand to belatedly conduct the thorough probe to which *all* petitioning workers are entitled by law at the administrative level.

The Labor Department simply cannot pretend that certifying workers *after* a court case has been filed, and *after* a supplemental investigation has been conducted in the course of a voluntary remand, can ever even begin to make those workers whole and put them in the same position that they would have been in had the agency conducted a proper initial investigation and granted the workers timely relief, within the 40 days mandated by statute. *Marathon Ashland* aptly noted: "TAA cases are different from most litigation before this court. This is not a situation, such as in customs or antidumping duty

cases, where a bond can be posted to cover anticipated cost and reduce liability." [FN63]*1342 *Former Employees of Marathon Ashland Pipeline, LLC v. Chao*, 27 CIT ----, ----, 277 F.Supp.2d 1298, 1313 (2003) ("*Marathon Ashland II*"), *rev'd on other grounds*, 370 F.3d 1375 (Fed.Cir.2004). As one lawyer put it, "It's one thing to see delays in cases involving dumping products on the U.S. market, it's quite another to see delays where people are being denied basic [TAA] assistance so that they can find jobs." "Analysis & Perspective," BNA Int'l Trade Reporter, at 796.

FN63. Workers who are belatedly awarded TAA benefits receive no interest or other compensation for the delay that they suffer. At best, such workers receive-months (or even years) after the fact-the same funds and training that they were entitled by statute to receive much earlier. Worse yet, all too often, delay effectively operates to reduce (and conceivably even eliminate) benefits to which workers are otherwise entitled by law.

For example, training is perhaps the key TAA benefit for most displaced workers. However, federal funds for TAA-related training are administered on a state-by-state basis; and (due to problems in the design and administration of the system, coupled with demand attributable to the overall state of the economy) many states have run out of training funds in recent years. In such cases, workers who would have been able to receive training if they been timely certified by the Labor Department may instead be deprived of training benefits because the agency failed to conduct an adequate initial investigation of the workers' petitions-and, by the time the workers were finally certified (*e.g.*, after actions were filed in court, and proper agency investigations conducted on remand), training funds in their states were depleted.

Moreover, in many cases, workers who have been forced to defer their training due to such funding shortfalls have exhausted much (if not all) of their stream of TAA income support payments ("Trade Readjustment Allowance" or "TRA" payments) by the time additional training funds become available. With few or no TRA payments forthcoming (to help cover their living expenses while they are enrolled in training), the workers often are forced either to forego training entirely, or to drop out of their training programs as soon as their TRA payments end. *See, e.g.*, Kletzer & Rosen at 317 n. 4 (explaining that "[w]orkers receive [TAA] training only if there are adequate funds available. Most states exhaust training funds ... well before the end of the [fiscal] year, denying workers the opportunity to enroll in training"); GAO Report 04-1012 at 4, 31-33 (reporting that 19 states discontinued training for TAA-eligible workers due to shortfalls in funding at some point between 2001 and 2003, and that six states already had been forced to do so in 2004 as of the date of GAO's survey); *Harper's Magazine* at 63 (same); "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 799 n. 11 (and sources cited there) (documenting funding shortfalls and waiting lists for TAA training); *Chicago Tribune* (profiling worker who was certified for TAA but denied benefits due to funding shortfall; citing results of GAO study, and noting that, "[i]n many cases, states did not receive enough funding to provide training even for workers deemed eligible").

Under the NAFTA-TAA statute (which was repealed/superseded as part of the TAA Reform Act of 2002), the consequences of botched Labor Department investigations were even more onerous. As a practical matter, any protracted delay in a NAFTA-TAA case could render workers' eventual certification a largely pyrrhic victory.

Generally, a worker must be enrolled in training in order to receive TRA payments covering that period (because, in principle, such payments are intended to help workers cover basic living expenses so that they may engage in training).

Under the Labor Department's interpretation of the statute and regulations, the agency may waive the training requirement where certification is delayed (*e.g.,* due to litigation), so that workers may retroactively receive TRA payments for periods even though they were not enrolled in training-*except in NAFTA-TAA cases.*

The Labor Department read the NAFTA-TAA statute as specifically precluding the agency from waiving the training requirement. The effect was to deny the payment of basic TRA benefits under NAFTA-TAA to workers who were not both (1) certified by the Labor Department, and (2) participating in approved training within the 104-week period beginning "with the first week following the week in which the adversely affected worker was most recently totally separated from adversely affected employment." *See generally* 19 U.S.C. §§ 2291(c), 2293(a)(2) (*amended by* § 2291 (Supp. II 2002)); 19 U.S.C. § 2331(d)(3)(A)-(B) (repealed 2002); 20 C.F.R. § 617.11(a)(2)(vii); *Former Employees of Tyco Electronics v. U.S. Dep't of Labor,* 28 CIT ----, ----, 318 F.Supp.2d 1354, 1356-58 (2004) ("*Tyco III*") *(quoting* relevant Labor Department correspondence); GAO Report 04-1012 at 19 n. 12 ("The ... NAFTA-TAA program had a training enrollment deadline and did not allow waivers."). (For a particularly succinct and cogent explanation of this problem, *see* Defendant's Memorandum of Law Regarding Length of Voluntary Remand (May 28, 2004), at 7-9, *filed in Former Employees of IBM Corp. v. U.S. Sec'y of Labor,* Court No. 04-00079.) *But see Whitin Machine Works,* 554 F.2d at 502 (in different context, rejecting proffered interpretation of another provision of TAA statute as "impossible to square with the remedial objectives of the Act"; "We cannot believe that Congress could have intended to deny any worker his federal benefits solely because of administrative footdragging.... The only conceivable purpose of [the timing requirement there at issue] was to further the Act's remedial goals by ensuring that there would be no long delays in the distribution of benefits; Congress apparently was interested not only in granting benefits but also in ensuring that, to the maximum extent feasible, the benefits were received during the periods in which they were most needed. It would be ironic indeed to convert this seemingly remedial provision into one which would have the effect of denying any benefits to some workers.").

In at least three litigated cases (*i.e., Tyco, Oxford Automotive,* and *Ericsson*), displaced workers suffered through repeated remands of their NAFTA-TAA claims and were eventually certified by the Labor Department, only to learn that the extended delays attendant to the agency's incompetence and intransigence had effectively rendered them ineligible for basic benefits. *See generally* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 823 n. 116 (discussing *Tyco*).

In those three cases, the workers ultimately succeeded in receiving at least some of those benefits-but only after more or less browbeating the agency into submission. *See generally Tyco III,* 28 CIT at ----, 318 F.Supp.2d at 1356-58; Hanifin at 11-12 (discussing post-judgment developments in Court No. 01-00453, noting that "after months of internal Labor Department debate, a [so-called] 'Tyco Waiver' was issued for [the Oxford Automotive workers]"); Defendant's Status Report (May 9, 2005) *and* Defendant's [Supplement to] Status Report (May 12, 2005) (including, as Attachment A thereto, a "Tyco Waiver" letter from the Labor Department, dated May 11, 2005), *filed in Former Employees of Ericsson, Inc. v. U.S. Sec'y of Labor,* Consol. Court No. 02-00809.

Indeed, as *Chevron III* emphasized, "as a general principle, the effectiveness of trade adjustment assistance depends upon its *timeliness.*" *Chevron III,*

27 CIT at ----, 298 F.Supp.2d at 1349 (emphasis added); *see also Whitin Machine Works*, 554 F.2d at 502 (criticizing Labor Department's***1343** "administrative footdragging," and emphasizing that "Congress apparently was interested not only in granting benefits but also in ensuring that, to the maximum extent feasible, *the benefits were received during the periods in which they were most needed*") (emphasis added). *See generally* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 818 (noting that, "by the time a case reaches the [Court of International Trade], ... it is likely already too late for ... the workers") (footnotes omitted). Thus, the consequences of Labor Department delays in certification can be profound-sometimes, quite literally, life-or-death:

> There is a very human face on [TAA] cases. Workers who are entitled to trade adjustment assistance benefits but fail to receive them may lose months, or even years, of their lives. And the devastating personal toll of unemployment is well-documented. Anxiety and depression may set in, with the loss of self-esteem, and the stress and strain of financial pressures. Some may seek refuge in drugs or alcohol; and domestic violence is, unfortunately, all too common. *The health of family members is compromised with the cancellation of health insurance, prescriptions go unfilled, and medical and dental tests and treatments must be deferred (sometimes with life-altering consequences*). And college funds are drained, then homes are lost, as mortgages go unpaid. Often, marriages founder.

Id., 27 CIT at ----, 298 F.Supp.2d at 1349 (emphasis added) (footnote omitted).[FN64] *Cf. Cleveland Board of Education v. Loudermill*, 470 U.S. 532, 548-51, 105 S.Ct. 1487, 84 L.Ed.2d 494 (1985) (Marshall, J., concurring in part) (spelling out the cost-in human terms-of unemployment, in context of discussion of pre-termination due process to which public employees may be entitled).

> FN64. In *Oxford Automotive*, for example, the Labor Department certified the workers for benefits only after multiple remands, and more than *three full years* after many of them lost their jobs. By that time, workers' lives had already been ravaged by "bankruptcies, divorces, [and] drug abuse." *See* Hanifin at 12.
>
> As pro bono counsel in that case put it, the workers' ultimate victory was therefore "bittersweet": "Because of the passage of time, most of the former ... plant employees had moved on with their life [by the time the Labor Department finally issued its certification]. A few found better jobs, most did not....Many ... [had been] forced to use their savings to survive until they obtained a job they could live on." *Id.*
>
> And, unfortunately, *Oxford Automotive* is no great anomaly. In *Chevron*, for example, it took the Labor Department *nearly four years* to grant the workers there the relief to which they were entitled. *See Chevron III*, 27 CIT at ----, 298 F.Supp.2d at 1345. *See also, e.g., Hawkins Oil & Gas II*, 17 CIT at 127, 130-31, 814 F.Supp. at 1113, 1115-16 (*more than three years* after layoffs, and following repeated remands to agency, Labor Department ordered by court to certify workers); "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 806 (noting that multiple remands are a common occurrence in TAA cases).

In the case at bar, at least one of the four representative plaintiff Workers who filed this action still had not found full-time employment more than one full year after his termination at BMC, resulting in "significant hardship for [his] family." In an attempt to make ends meet, he had no choice but to liquidate his retirement account, and his wife was forced to start working. *See* S.A.R. 55. Even so, they count themselves among the lucky few, because at least her job offers health insurance coverage. *Id.* As in *Chevron*,"[t]he record here-perhaps mercifully-does not reveal the current employment status of ... [the scores of other displaced BMC] Workers, or how (and with what ***1344** success) ... [they] have endeavored to support themselves and their families" since they lost their jobs. *See Chevron III*, 27 CIT at ----, 298 F.Supp.2d at 1349.

Delay was thus the major concern of the Workers here, from the very inception of this action. *See, e.g.*, Plaintiffs' Reply to Defendant's Response to

Plaintiffs' Comments on Remand Results, at 2 (noting that "timing was of singular concern to Plaintiffs"). Accordingly, for example, the Workers conditioned their consent to the Government's motion for a voluntary remand on the entry of a detailed order requiring the Labor Department, on remand, "to undertake *a comprehensive review of all issues* relevant to determining whether [the Workers] are eligible for TAA benefits," and mandating that the remand results be filed within 60 days. *See* Plaintiffs' Response to Government's Second Amended Motion to Remand Case at 4 (emphasis added). The Workers were understandably concerned about the prospect of protracted delays associated with the "ping-pong" phenomenon, where a case repeatedly bounces back and forth between the Labor Department and the court as a result of the agency's standard "piecemeal" approach to the investigation of TAA petitions.[FN65]

> FN65.*See* Plaintiffs' Response to Government's Second Amended Motion to Remand Case at 2-5:
>
> > Plaintiffs are eager to ensure that, regardless of whether this matter is resolved on remand or is resolved after returning to the CIT, it be remanded only once if at all possible....
> >
> > Plaintiffs are concerned that if a negative certification determination is made [on remand], and if that determination is made on the perceived failure to satisfy a single statutory requirement ..., additional future remands in this proceeding might become more likely.
> >
> > This concern stems from that fact that, in response to Plaintiffs' initial petition for benefits, and in response to Plaintiffs' petition for reconsideration for benefits, the only issue the Department reached was that BMC Software was not involved with the production of an "article" .... No express determination was made as to whether the other statutory requirements for issuance of benefits had been [met].... Should a similarly narrow conclusion on the 'article' issue be reached on remand but then be reversed by this Court, a second remand to investigate whether the other statutory requirements are satisfied in this case would seemingly be unavoidable.
>
> Accordingly, Plaintiffs believe that a determination of all statutory elements [for TAA certification] ... would serve the interests of all parties.... Plaintiffs respectfully state that the potential of enduring future remands solely to develop facts that might have been developed in a thorough initial remand is something that should be avoided.
>
> *See also* Letter from Counsel for Plaintiffs to Counsel for Defendant (July 27, 2004) (S.A.R.26-28) (Workers "are eager to ensure that, regardless of whether this matter is resolved on remand or is resolved after returning to the CIT, it be remanded only once if at all possible"); *Former Employees of Chevron Prods. Co. v. U.S. Sec'y of Labor*, 27 CIT ----, ----n. 9, 279 F.Supp.2d 1342, 1355 n. 9 (2003) ("*Chevron II*") (criticizing agency's general "piecemeal" approach to TAA and NAFTA-TAA investigations).
>
> As illustrated by the history of virtually every TAA case filed with the court in recent years, the Labor Department's standard investigative *modus operandi* appears to be to target whichever element of a TAA claim the agency perceives to be the weakest, and-if the agency finds that that particular element is not satisfied-to deny the claim on that basis, with no investigation or analysis of the other elements of the claim. *See, e.g., IBM*, 29 CIT at ----, 403 F.Supp.2d at 1345 (finding that Labor Department "aborted its analysis of the [workers'] petition, and did not reach determinations on all applicable criteria for certification"); *EDS I*, 28 CIT at ----, 350 F.Supp.2d at 1292 (emphasizing that Labor Department prematurely "aborted" its investigation); *Ericsson I*, 28 CIT at ----, 2004 WL 2491651 at * 3 (criticizing Labor Department's "truncated investigation," which agency sought to

excuse "on the grounds that, 'based on the facts in the case', a full investigation would serve no purpose since workers do not produce an article as required [for TAA eligibility]").

But the considerations of administrative economy that might typically justify such "cherry-picking" by an agency contemplate that the agency's determinations are the product of thorough, thoughtful consideration. And, as discussed above, the Court of International Trade has found-in case after case-that the Labor Department's TAA determinations are anything but. *See generally* n. 10 (summarizing various recent opinions criticizing Labor Department's handling of TAA cases).

Also weighing heavily *in favor of* comprehensive TAA investigations (*i.e.*, agency investigations that address all elements of a claim) and *against* serial remands (both voluntary and court-ordered) is the remedial nature of the TAA statute. *See, e.g., UAW v. Marshall*, 584 F.2d at 396 (noting the "general remedial purpose" of TAA statute); *Fortin v. Marshall*, 608 F.2d at 529 (same); *Whitin Machine Works*, 554 F.2d at 500, 502 (same).

Indeed, the appellate courts have emphasized that Congress "clearly desired the expeditious treatment of [TAA] petitions," weighing in against "administrative footdragging" and interpreting the TAA statute "to further the [statute's] remedial goals by ensuring that there would be no long delays in the distribution of benefits." *See, e.g., Whitin Machine Works*, 554 F.2d at 501-02, 504. As one Court of Appeals has explained:

> Congress apparently was interested not only in granting benefits but also in *ensuring that*, to the maximum extent feasible, *the benefits were received during the periods in which they were most needed.*
>
> *See generally id.* at 502 (emphasis added).

In an effort to limit the number of remands required to reach a sustainable agency determination, frustrated courts and plaintiff workers have increasingly sought to use exquisitely detailed remand orders to structure agency investigations on remand, to ensure that all elements of a claim are adequately investigated. *See, e.g.*, Remand Order (Aug. 11, 2004); *Ericsson I*, 28 CIT at ---, 2004 WL 2491651 at * 7. *But see Former Employees of Quality Fabricating, Inc. v. U.S. Sec'y of Labor*, 448 F.3d 1351, 1357 (Fed.Cir.2006) (noting that Court of International Trade "has no authority to 'grant an injunction or issue a writ of mandamus in any civil action commenced to review a final determination of the Secretary of Labor,' " but finding it unnecessary-under the circumstances of that case-to reach "the question of whether there is any basis [for sustaining] ... the Order of the Court directed to the Secretary," where trial court's Order, *inter alia*,"directed Labor to take specific steps to notify the employees, and report back with status updates," and sought "to reach federal government agencies and resources beyond Labor by directing utilization of all available 'government resources' to locate and provide notice to affected employees."); *compare UAW v. Brock*, 816 F.2d at 768 (acknowledging District Court's authority over nonparty state agencies, as "a function of the [Labor] Secretary's authority over those agencies").

***1345** Among other things, the Workers voiced concerns that the time consumed by the litigation process would itself "dimin[ish] ... the benefits [they could] expect to receive should they ultimately prevail." *See* Plaintiffs' Response to Government's Second Amended Motion to Remand Case at 2.[FN66] In later seeking an extension of time of an additional 60 days to file the results of the voluntary remand, the Government induced the Workers' consent to the requested extension of time-and the Court's entry of

an order granting that extension-with express, unequivocal assurances that "in the event petitioners are certified in this case, the petitioners would ***1346** be entitled to receive full TRA benefits regardless of the date they are certified." *See* Defendant's Consent Motion for an Extension of Time to File Remand Results, at 3-4; *see also* Letter from Counsel for Plaintiffs to the Court (Feb. 11, 2005) ("Given the Government's representation, Plaintiffs consented to an extension of time, expressly predicated on their belief that, should they prevail, they would not be prejudiced as a result of [that extension]").

> FN66.*See also* Letter from Counsel for Plaintiffs to the Court (Feb. 11, 2005) (Workers "concerned with any adverse impact on [their] receipt of benefits" associated with litigation delays; "should they prevail, [Workers] [s]hould not be prejudiced" by time consumed by litigation; "[Workers] are entitled to a full period of benefits, unencumbered by the delays associated with administrative review and litigation in this matter"); Plaintiffs' Reply to Defendant's Response to Plaintiffs' Comments on Remand Results, at 2 (Labor Department "should not now deny [Workers] any benefits to which they would otherwise be entitled but for the passage of time due to the instant litigation"), 4 (litigation should not be allowed "to extinguish a portion of [Workers'] benefits"; Workers should receive "the full measure of benefits [they] would have been able to receive if the Department [of Labor] had properly certified them for benefits in the first instance").

The Workers therefore expressed dismay that the Labor Department's Revised Remand Determination makes no reference to the assurances given earlier by the Government. The Workers have urged the Court to "expressly order[ ], in accordance with Defendant's representation, that Plaintiffs, having been certified, are entitled to receive full TRA benefits, regardless of the date of their certification." *See* Plaintiffs' Comments on Defendant's Determination on Remand, at 1-2. For its part, the Government responded with the (admittedly sophisticated and measured) legal equivalent of the playground taunt, "MYOB" ("Mind Your Own Business"). Specifically, the Government maintains that the Court lacks jurisdiction to grant the Workers' request:

> [A]lthough the Court may sustain a determination or remand the case to Labor for further fact finding or explanation, no provision [in 19 U.S.C. § 2395] allows the trial court to specify the level of benefits to which a certified petitioner may be eligible. Accordingly, although Labor confirms that the delay from litigation will not affect the calculation of benefits ..., the Court lacks the authority to dictate whether the petitioners will, in fact, receive "full" TRA benefits....
>
> [Defendant's] Response to Plaintiffs' Comments In Response to Labor's Remand Determination, at 3. *See* Defendant's Memorandum of Law in Response to the May 12, 2005 Order, at 3 (characterizing as "inappropriate" the Court's inquiry into the effects, if any, of litigation delays on relief ultimately available in a TAA case).[FN67]
>
> > FN67.*See also* Defendant's Memorandum of Law In Response to the February 4, 2005 Order, at 1 ("the Court lacks the authority to dictate whether the petitioners will, in fact, receive 'full' TRA benefits"), 2 ("any order declaring that the petitioners would be 'entitled' to 'full' TRA benefits ... would impermissibly exceed this Court's limited authority to review Labor's determination of eligibility"), 4 ("[a]lthough the Court may ... remand the case to Labor ..., no provision in [the statute] allows the Court to specify the level of benefits [for] which a certified petitioner may be eligible. Thus, the Court lacks jurisdiction to review the calculation of benefits.").
>
> The Government has advanced the same argument in other TAA and NAFTA-TAA cases as well. For example, in *Ericsson*, the Government argued:
>
> Although the Court may sustain a determination or remand the case to Labor for further fact finding or explanation, no provision in [19 U.S.C. § 2395] allows the Court to specify the level of benefits to which a certified petitioner may be eligible. Thus, the Court lacks jurisdiction

to review the calculation of benefits.

Determinations with respect to calculation of benefits are generally reviewable by *state courts* in accordance with *state law.*

[Defendant's] Status Report (May 9, 2005) at 4-5, *filed in Former Employees of Ericsson, Inc. v. U.S. Sec'y of Labor,* Court No. 02-00809; *see also* [Defendant's Supplemental] Status Report (May 12, 2005) at 1-2 ("the state's calculation and issuance of benefits are not matters properly before this Court"; "any dispute with state officials regarding distribution of benefits should be handled by state courts"). Similarly, in *Tyco,* the Proposed Judgment Order proffered by the Government stated:

Because the Revised Remand Determination is supported by substantial evidence and otherwise in accordance with law, the Court does not reach the question of whether it possesses jurisdiction to entertain claims against certain state agencies that are entrusted to administer the distribution of NAFTA-TAA benefits.... Likewise, the Court need not address whether the grant of "jurisdiction to affirm the action of the Secretary of Labor ... or set aside such action" pursuant to 19 U.S.C. § 2395(c), operates as a grant of jurisdiction for this Court to direct the United States Department of Labor to direct a state agency to administer its benefits in a certain way.

Proposed Judgment Order at 8-9 (submitted under cover of [Defendant's] Notice of Filing, dated March 19, 2004), *filed in Former Employees of Tyco Electronics v. U.S. Dep't of Labor,* Court No. 02-00152. And, in *Former Employees of Quality Fabricating, Inc. v. U.S. Dep't of Labor,* Court No. 02-00522, *see* [Plaintiffs'] Status Report Concerning Draft Proposed Order, at 2 (reporting Government's objection to paragraph in proposed order on grounds that "it sought to order an action that was outside the Court's jurisdiction, *i.e.,* that it ordered the specific award of benefits to Plaintiffs"), as well as [Defendant's] Motion for Stay Pending Possible Appeal (July 11, 2005) at 10-11 (asserting that "the Court lacks jurisdiction concerning the benefit claims of individual workers. Rather, such claims belong in state court."). *See also* McCarthy at 7-8 (arguing that, "[g]iven the changing fora for judicial review of specific certification determinations over the years, it makes sense to construe narrowly the jurisdictional grant to the Court of International Trade in the area of trade adjustment assistance").

The jurisdictional arguments discussed above can be viewed in the context of other, similar challenges in recent years. In one line of cases, for example, the Government has appealed court-ordered TAA certifications of workers, arguing that such action is beyond the statutory authority of the Court of International Trade-notwithstanding the Labor Department's decade-plus prior history of acquiescing in the remedy. *Compare* Marathon Ashland, 370 F.3d at 1385-86,*and* Barry Callebaut, 357 F.3d at 1381-83,*with* Pittsburgh Logistics II, 27 CIT at ---, 2003 WL 22020510 at * 15 ("Labor shall certify the plaintiffs as eligible for trade adjustment assistance benefits forthwith"); Hawkins Oil & Gas II, 17 CIT at 131, 814 F.Supp. at 1115-16 ("the Secretary of Labor shall certify plaintiff as eligible for trade adjustment assistance"); *and* United Electrical, Radio and Machine Workers of America v. Martin, 15 CIT 299, 308-09 (1991) ("the Secretary of the United States Department of Labor shall certify petitioners as eligible to receive trade adjustment assistance").

To date, the Court of Appeals has side-stepped the Government's challenge. *See* Marathon Ashland, 370 F.3d at 1386 (under the circumstances, finding "no occasion to address the government's

argument that the remedy ordered by the [Court of International Trade] was outside [its] authority"), *Barry Callebaut*, 357 F.3d at 1383 (deeming "moot" "the question of the Court of International Trade's authority to order Labor to certify [workers]" for TAA benefits). Indeed, the workers in *Barry Callebaut* specifically cautioned the Court of Appeals against writing the Labor Department a "blank check": "If Labor were correct that the Court of International Trade could do nothing other than affirm or remand, ... the court would be powerless to do anything more than order a potentially endless series of futile remands, no matter how many times Labor failed to perform an adequate investigation"-"an 'absurd result'." 357 F.3d at 1382-83. *Cf. Nippon Steel Corp. v. United States*, 458 F.3d 1345, ----, 2006 WL 2290991 at * 12 (Fed.Cir.2006) (pointedly declining to endorse Government's claim that 19 U.S.C. § 1516a precludes Court of International Trade from reversing agency determinations in international trade cases and allows Court only to affirm or remand; emphasizing that "[i]t may well be that, in another situation, the trade court may be faced with [an agency] determination that is unsupported by substantial evidence, and for which a remand would be 'futile.' ").

***1347** It is, of course, true that the statutory scheme generally vests the state courts with jurisdiction over disputes concerning the specific TAA benefits to which individual members of a certified group of former employees are entitled. *See* 19 U.S.C. § 2311(d); *UAW v. Brock*, 477 U.S. 274, 285, 106 S.Ct. 2523, 91 L.Ed.2d 228 (1986). But 19 U.S.C. § 2311(d) is not the forbidding, impenetrable citadel that the Government seeks to depict. *See, e.g., UAW v. Brock*, 816 F.2d 761, 768 (D.C.Cir.1987); *Hampe v. Butler*, 364 F.3d 90, 93 (3d Cir.2004).[FN68]

FN68. On remand, following the Supreme Court's opinion in *UAW v. Brock*, 477 U.S. 274, 106 S.Ct. 2523, 91 L.Ed.2d 228, the Court of Appeals for the D.C. Circuit acknowledged that the District Court had authority over nonparty state agencies, albeit as "a function of the [Labor] Secretary's authority over those agencies." *UAW v. Brock*, 816 F.2d at 768. Thus, the Court of Appeals held, "as the states administer the TRA program as 'agents' of the United States, *...the District Court's order requiring the Secretary to modify certain directives to the state agencies was entirely appropriate." Id.* (emphasis added). Moreover, the D.C. Circuit echoed the Supreme Court's sentiment as to the ultimate effect of the District Court's order to the Labor Department: "[w]e have little doubt that the state agencies ... would obey the Secretary's directive ..." *Id. (quoting* 477 U.S. at 292, 106 S.Ct. 2523).

Hampe v. Butler recently reaffirmed the continuing vitality of the D.C. Circuit's opinion in *UAW v. Brock*. Conceding that the federal courts "cannot hear *direct requests* for redetermination" of individual claims for TAA benefits, the Court of Appeals for the Third Circuit nevertheless firmly rejected the Government's argument that the relegation to *state courts* of jurisdiction to hear individual redetermination claims under 19 U.S.C. § 2311(d) deprives *federal courts* of jurisdiction to hear statutory claims that may "influence the outcomes of redetermination proceedings." *Hampe v. Butler*, 364 F.3d at 93 (emphasis added) (*cited for another proposition with approval in Former Employees of Quality Fabricating, Inc. v. U.S. Sec. of Labor*, 448 F.3d at 1352). *See generally* "Third Circuit Says DOL Must Order State to Reconsider Job Training Travel Costs," *U.S. Law Week*, April 20, 2004, at 1628-29 (discussing *Hampe v. Butler*).

See also 28 U.S.C. § 1367(a) (authorizing district courts' exercise of "supplemental jurisdiction" to entertain claims "that are so related to claims in the action within such original jurisdiction that they form part of the same case or controversy under Article III of the United States Constitution"); *United States v. Hanover*

Ins. Co., 18 CIT 991, 992-93, 869 F.Supp. 950, 952 (1994) (holding that § 1367(a) extends to Court of International Trade under 28 U.S.C. § 1585, which grants that court "all the powers in law and equity of, or as conferred by statute upon, a district court"), *aff'd*, 82 F.3d 1052 (Fed.Cir.1996); *B-West Imports, Inc. v. United States*, 19 CIT 303, 315 n. 15, 880 F.Supp. 853, 864 n. 15 (1995), *aff'd*, 75 F.3d 633 (Fed.Cir.1996); *Associacao Dos Industriais De Cordoaria E Redes v. United States*, 17 CIT 754, 763 n. 16, 828 F.Supp. 978, 988 n. 16 (1993). *Cf. Heartland By-Products, Inc. v. United States*, 424 F.3d 1244 (Fed.Cir.2005) (notwithstanding its dismissal of an action, under doctrine of ancillary enforcement jurisdiction, Court of International Trade retained inherent power-pursuant to 28 U.S.C. § 1585-to determine effect of, and ensure compliance with, its ruling); *Former Employees of Southern Triangle Oil Co. v. U.S. Sec'y of Labor*, 14 CIT 100, 105-07, 731 F.Supp. 517, 521-23 (1990), *vacated and remanded on other grounds*, 925 F.2d 1479, 1991 WL 4647 (Fed.Cir.1991) (rejecting Government's argument that Court of International Trade lacked jurisdiction, where state authority's refusal to award TAA benefits to individual worker was due to "the terms of the Labor Department's certification," which were not in accordance with law).

In short, the division of jurisdiction between the state courts and the federal courts in TAA-related cases is considerably more nuanced than the Government has, from time to time, suggested.

***1348** Even assuming *arguendo* that the court-in a run-of-the-mill TAA case-lacks the authority to "expressly order[ ], ... that Plaintiffs, having been certified, are entitled to receive full TRA benefits, regardless of the date of their certification," it is clear beyond cavil that "a court always retains jurisdiction to supervise and administer its own docket." *Aryinmeritor, Inc. v. United States*, 29 CIT ----, ----, 2005 WL 1958804 at *1 (2005). *See also, e.g., Landis v. North American Co.*, 299 U.S. 248, 254-55, 57 S.Ct. 163, 81 L.Ed. 153 (1936) (invoking "the power inherent in every court to control the disposition of the causes on its docket with economy of time and effort for itself, for counsel, and for litigants," involving "the exercise of judgment" on the part of the court); *L.E.A. Dynatech, Inc. v. Allina*, 49 F.3d 1527, 1530 (Fed.Cir.1995) (same).

[6] Thus, to the extent that the time consumed by litigation may operate in any ***1349** fashion to limit the effectiveness of any relief that may ultimately be awarded in a TAA case, the court is duty-bound-particularly in light of the remedial nature of the TAA statute-to expedite its proceedings, limiting the number and the duration of remands, and otherwise keeping the parties (particularly the Labor Department) on a short leash.[FN69] To the extent that litigation delays may operate to limit the effectiveness of any relief that may ultimately be awarded in a TAA case, the judges of the Court of International Trade have a clear and legitimate interest in the matter-and inquiries on the topic are in no way "inappropriate."[FN70] *Cf. Whitin Machine Works*, 554 F.2d at 502 (rejecting proffered interpretation of provision of TAA statute as "impossible to square with the remedial objectives of the Act," and emphasizing that Congress could not have "intended to deny any worker his federal benefits solely because of administrative footdragging"; "remedial goals" of TAA statute are furthered "by ensuring that there [are] no long delays in the distribution of benefits"; "Congress apparently was interested not only in granting benefits but also in ensuring that, to the maximum extent feasible, the benefits were received during the periods in which they were most needed.").

FN69. The Government's argument has a particularly hollow ring given its failure in cases such as *Tyco, Oxford Automotive*, and *Ericsson* to affirmatively alert the court and all parties in advance to the potentially devastating effect of litigation delays on the benefits ultimately awarded in those NAFTA-TAA proceedings. *See* n. 63, *supra*.

FN70. *See* Defendant's Memorandum of Law in Response to the May 12, 2005 Order, at 3 ("[I]t is inappropriate for the Court to

> inquire into matters beyond its jurisdiction. To the extent that any petitioners experience perceived difficulties in the receipt of benefits after certification has issued, any such grievance would be a matter for state courts.").

Finally, without regard to any authority the Court may (or may not) have, in the abstract, to order that a group of petitioners are "entitled to receive full TRA benefits, regardless of the date of their certification," there is nothing whatsoever that is abstract or hypothetical about the circumstances of the case at bar. To the contrary, in its Motion for an Extension of Time to File Remand Results, the Government here stated flatly and unequivocally that, "in the event petitioners are certified in this case, *the petitioners would be entitled to receive full TRA benefits* regardless of the date they are certified." (Emphasis added.) Thus, as the Workers have correctly observed, the issue presented in this case "is whether this Court should exercise its inherent authority to give effect to a representation made by the Government in a pleading before this Court." Plaintiffs' Reply to Defendant's Response to Plaintiffs' Comments on Remand Results, at 2. The Workers emphasize:

> Plaintiffs ... have a reasonable expectation as litigants to have a measure of reliability in their dealings with the government in this case [-as does the Court-].... The Government should not have assured Plaintiffs of their entitlement to full benefits if the Government knew it would ultimately take the position that its representation (designed to induce an extension [of time]) could not be enforced. *In such a scenario, the Court must have the authority to hold the Government to its words.*

Id. (emphasis added). Surely the Government does not contend that the Court is powerless to hold the Government to its word, or that petitioning workers are relegated to the state courts to enforce express representations made by the Government to petitioning workers and to the Court of International Trade, and on which the workers and the Court have relied.

In any event, the Workers subsequently advised that-armed with Defendant's ***1350** Memorandum of Law in Response to the May 12, 2005 Order (which confirms, *inter alia,* that the absolute value of benefits available to a certified worker does not vary based on when the worker was certified, and that, if necessary, a full 52 weeks of Basic TRA benefits can be paid entirely retroactively when certification is greatly delayed)-they no longer foresaw any insurmountable obstacles to their receipt of the full measure of TAA benefits.[FN71] *See* Letter from Counsel for Plaintiffs to the Court (May 19, 2005) (detailing the many challenges the Workers encountered in obtaining their TAA benefits from Texas Workforce Commission).[FN72] The Workers further advised that if-contrary to their expectations-they did in fact continue to experience problems with their receipt of benefits, they would promptly notify the Court. *Id.* The Workers' silence in the intervening months suggests that any need for further proceedings to "hold the Government to its words" has been obviated.

> FN71. For analyses confirming that delays attendant to TAA litigation do not prejudice any rights that workers may have to a full measure of Basic TRA benefits, *see* Defendant's Memorandum of Law in Response to the May 12, 2005 Order, at 3 ("confirm[ing] that Labor construes the language of 19 U.S.C. § 2293(a)(2) as limiting only the period of unemployment for which basic TRA benefits may be paid-not as restricting in any way when those benefits maybe paid, and not as precluding the payment of a full 52 weeks of TRA benefits entirely retroactively (*i.e.,* even when certification occurs well after the entire 104-week period has expired)") (*citing* Guidance Letter issued by Labor Department, included as Att. A to [Defendant's] Status Report (May 12, 2005), *filed in Former Employees of Ericsson, Inc. v. U.S. Sec'y of Labor,* Court No. 02-00809, *and* Memorandum of Law (May 28, 2004), *filed in Former Employees of IBM Corp. v. U.S. Sec'y of Labor,* Court No. 04-00079 (explaining that, where certification occurs after statutory 104-week period has elapsed due to litigation delay, state agencies will make lump sum payments based on the total number of weeks of unemployment categorized as basic TRA during this period in which the worker otherwise met the eligibility criteria)).

See also Letter from the Court to Counsel (May 12, 2005); Defendant's Memorandum of Law in Response to the February 4, 2005 Order, at 2-3; Letter from the Court to Counsel (Feb. 4, 2005), at 1-3; [Defendant's] Response to Plaintiffs' Comments in Response to Labor's Remand Determination, at 2-3; Defendant's Consent Motion For an Extension of Time to File Remand Results, at 3-4; Letter from the Court to Counsel (Aug. 11, 2004).

For analyses confirming that the time consumed by TAA litigation does not prejudice any rights that workers may have to a full measure of Additional TRA benefits, *see* Defendant's Memorandum of Law in Response to the February 4, 2005 Order, at 3-4; Letter from the Court to Counsel (Feb. 4, 2005), at 3-4.

FN72. The Workers' *pro bono* counsel are to be credited for assisting with the Workers' pursuit of their individual claims for TAA benefits at the state level. In this case, as in many others, navigating the bureaucracy of the Labor Department is merely the first step for petitioning workers. Certification by the Labor Department can be an illusory remedy.

More generally, routine requests for voluntary remands cannot be justified on the grounds that there are only "[a] minority of [TAA] cases in which a negative determination is challenged in the Court of International Trade." [FN73] While it is true that ***1351** only a tiny fraction of the agency's denials are ever appealed to this court, that fact provides no logical support for the notion that routine agency requests for voluntary remands should be condoned as "business as usual."

FN73. *See* McCarthy at 14 ("Given the context of ... Labor's administration of the [TAA] program, in which many petitions are certified as eligible following investigation, it is not unreasonable for Labor to conduct further investigation in the minority of cases in which a negative determination is challenged in the Court of International Trade.").

According to an October 2005 article in the *Chicago Tribune*,"[t]he Labor Department denies 40 percent of the [TAA] petitions" it receives. *See also Harper's Magazine* at 63 ("[a]bout one third of all TAA petitions the Labor Department receives it denies outright"); "Analysis and Perspective," *BNA Int'l Trade Reporter* at 797 (same).

Research has identified no study analyzing those cases in which the Labor Department's initial investigation results in certification *versus* those in which certification is denied.

For example, is there a correlation between the extent of the resources that the agency devotes to a particular investigation and the Labor Department's determination in that case (granting or denying the petition)? Does the outcome depend on the individual investigator to whom a particular petition is assigned? Do some investigators consistently conduct more thorough investigations than other investigators? Is there a correlation between the extent of the investigation and the outcome? (In other words, is a thorough investigation more likely to lead to certification than to denial?) Are petitions granted much more frequently in some industries than in others (and, if so, why)? Are petitions involving greater numbers of displaced workers more (or less) likely to be granted? Are petitions more likely to succeed if the Labor Department has previously granted a prior petition filed by other workers from the same company? Similarly, if the Labor Department has previously denied a related prior petition, does a petition get shorter shrift, and is it more likely to be denied? Do petitions filed by an employer or by a union stand a greater chance of success than those filed by *ad hoc* groups of individual workers? Are petitions from some regions of the

country more likely to succeed than others? Does it make a difference whether the petitioners are represented by counsel at the agency level? Is a petition more likely to be granted if the case has had a high profile in the media, or if the Labor Department has been on the receiving end of expressions of Congressional interest? (*Cf. Murincsak v. Derwinski*, 2 Vet.App. 363, 372 (1992) (*citing* correspondence between claimant veteran and U.S. Senator, and between U.S. Senator and Secretary for Veterans Affairs).) Are petitions filed with the assistance of state or local employment offices more likely to succeed? (*Cf.* GAO Report 93-36 at 3, 7-8 (noting correlation between number of TAA petitions filed from particular states and the relative level of assistance in filing of petitions that those states provide to interested workers).) What *are* the determinative factors-and are they proper?

As section I.A above explains, the TAA statutes are remedial legislation. For that reason, and "[b]ecause of the *ex parte* nature of the ... process," the Labor Department is obligated by law to conduct rigorous investigations of *all* petitions filed with the agency, "with the utmost regard for the interest of the petitioning workers." *Int'l Molders and Allied Workers' Union*, 643 F.2d at 31. *See also Stidham*, 11 CIT at 551, 669 F.Supp. at 435 (citation omitted). Thus:

> *It would be wholly inconsistent with Congress' intent if* the trade adjustment assistance programs were to become little more than "claims mills," where all but the most well-documented and patently meritorious claims were denied at the agency level, and *thorough investigations were largely reserved for those few cases which were appealed to the courts.*
>
> *Ameriphone*, 27 CIT at ---- n. 9, 288 F.Supp.2d at 1359 n. 9 (emphasis added).

Indeed, the Labor Department would be wrong to tout the relatively low number of denials appealed to the court as any sort of meaningful measure of the integrity of the agency's administrative process. It is unlikely that many of the workers who fail to appeal intend to confer their imprimatur on the agency's handling of their cases.[FN74] The reality is that workers who find themselves unemployed are often traumatized, and-at least initially-experience great emotional turmoil, and are overwhelmed by unemployment-related uncertainties in their financial and personal lives.[FN75] As a result, relatively few of those who might ***1352** otherwise be expected to apply for benefits actually manage to summon up the energy to file a timely TAA petition. And the vast majority of those who do are *pro se*.[FN76]

> FN74. *See, e.g.*, GAO Report 93-36 at 7 ("Despite flaws in Labor's investigations, few determinations are appealed.... Although 65 percent of the 92 denied petitions in [GAO's] sample had flawed investigations, in only 19 cases did petitioners request that Labor reconsider its decision and in only 3 did petitioners appeal Labor's decision to the Court of International Trade."); "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 805 n. 39 (*citing* 1992 GAO Report) ("Most workers whose [TAA] claims are denied never seek [judicial] review.").
>
> FN75. *See, e.g.*, GAO/T-HRD-94-4, "Dislocated Workers: Trade Adjustment Assistance Program Flawed," Oct. 1993, at 5 ("GAO Report 94-4") (explaining that "dislocated workers often need ongoing monitoring, encouragement and various forms of emotional support to help them cope with financial as well as personal problems ...*[E]motional turmoil* [is] felt by those who lose their jobs, including *depression* and *a questioning of their skills and competencies*.... [P]roviding assistance to reduce *anxiety* and *help dislocated workers cope* with their problems is an essential component of successful dislocated worker projects") (emphases added) (citation omitted); GAO Report 04-1012 at 3 (emphasizing that unemployed workers need time "to process the *trauma* of losing their jobs and to accept the need for training or other services"), 17 (noting that "it often takes time for dislocated workers to process

the *emotional shock* of being laid off") (emphases added).

See also "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 819 (noting that many displaced workers "lack the time, resources, ... [and] educational background necessary to complete the [TAA] petition[ ] in a completely responsive manner") & n. 100 (*citing* GAO data showing that approximately 80% of petitioning workers "have not gone past high school in their education" and that 20% are not proficient in English).

FN76. *See, e.g.*, McCarthy at 15 (acknowledging that, in TAA cases, "[t]he petitioners are usually unrepresented by counsel" in proceedings before the agency).

It should therefore come as no surprise that, when their TAA petitions are denied, only a mere handful of workers persevere and pursue their claims into court-whether due to resignation, sheer fatigue and diminishing emotional stamina, the press of other urgent priorities, the intimidating prospect of navigating the litigation process as a lay person, or even a blind faith in the Labor Department and an all-too-often unwarranted assumption that the agency properly discharged its duties. *See generally Ameriphone*, 27 CIT at ---- n. 9, 288 F.Supp.2d at 1359 n. 9 (noting that "for various reasons (including, for example, a blind faith in the Labor Department and its discharge of its duties), the vast majority of workers whose petitions are denied never challenge the agency's determinations in court").

In sum, it would be a serious mistake to read much of anything into the relatively low number of denials of TAA petitions that are challenged in court. What *is* telling is the Labor Department's track record on appeal.

E. *The Labor Department's Overall "Track Record" Before the Court*

An analysis of the TAA cases filed with the Court in the four-year period from 2002 through 2005 [FN77] reveals that, of the 45 TAA cases litigated to resolution on the merits,[FN78] the Labor Department ultimately certified the workers in all but four cases. In other words, the Labor Department's denials were sustained by the court in a mere four out of 45 cases. And, even in those four cases, the denials were sustained only *after* the agency had the benefit of one or more remands to bolster the investigative record.[FN79] Thus, at least during the four-year period of review, the ***1353** Labor Department *never even once* successfully defended a denial of TAA certification solely on the strength of the agency's initial investigation.[FN80]

FN77. The analysis includes both NAFTA-TAA cases and TAA cases, as well as Alternative TAA ("ATAA") cases. It does not include Agricultural TAA cases, because those cases are not handled by the Labor Department.

FN78. By definition, this figure does not include cases that were dismissed for lack of jurisdiction or for failure to prosecute, or that were voluntarily dismissed by the plaintiff workers. Nor does it include the five TAA cases filed in 2004 and the six filed in 2005 that remain pending as of this date.

FN79. Moreover, the Labor Department's recent change of position on the definition of "article" for TAA purposes vis-a-vis software and other "intangibles" casts doubt on the result in at least some of the four cases. *See, e.g., Former Employees of Mellon Bank, N.A. v. U.S. Sec'y of Labor*, Court No. 03-00374 (petitioning workers who "designed and developed computer software applications ... to provide financial services to [bank] customers" denied certification, where Labor Department reasoned that "informational products that could historically be sent in letter form and that can currently be electronically transmitted" are not "articles" for purposes of TAA, and the "the design and development of ... software itself" does not constitute "production"); *Former Employees of Sun Apparel of Texas v. U.S. Sec'y of Labor*, Court No. 03-00625 (petitioning garment workers denied certification where Labor Department's determined that

> "patterns and markers" produced by workers "were created by using special computer programs,""were neither stored nor transmitted in a physical medium, but existed in an electronic form (such as a file on a computer server or an electronic mail)," "were electronically manipulated," and "were sent exclusively via electronic mail").
>
> FN80. "According to an analysis [by the Bureau of National Affairs of opinions issued between 2001 and early May 2004], ... the [Court of International Trade] affirmed the Labor Department's denial of TAA certification in only five of the forty-one cases it ruled on during roughly the same time." *See Harper's Magazine* at 63; "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 806 (BNA "study of three years of decisions found that the [Court of International Trade] upheld only 12.5% of [the Labor Department's] denials of certifications of eligibility").

Those statistics alone are sobering enough. But there is even more here than meets the eye. The fact is that the TAA cases filed with this court almost certainly are just the tip of the iceberg.

Unlike petitioning workers in TAA cases, litigants in most other cases before federal courts and agencies are represented by counsel, who perform what is essentially a screening function by advising their clients whether a particular case is worth litigating, and-if the case is lost at the initial level-whether an appeal is worth the nickel. Not so in TAA cases. Because the vast majority of the workers who file TAA petitions with the Labor Department are *pro se,* they lack access to the legal expertise that would enable them to make informed judgments-particularly in light of the complex and nuanced statutory and regulatory scheme-about the relative merits of their claims.

In TAA cases, there generally are no lawyers separating the wheat from the chaff, advising petitioning workers to pursue in court only those cases with the greatest likelihood of success. It is, therefore, reasonable to assume that the TAA petitions which are *denied but not appealed* to the court are-on the whole-no less meritorious than the denied petitions which *are* challenged here. Extrapolating workers' roughly 90% "rate of success" before the court to the hundreds of TAA petitions that are denied but not appealed every year suggests that the Labor Department's failure to properly investigate petitions is routinely depriving thousands of U.S. workers of the TAA benefits to which they are legally entitled.[FN81] The Labor***1354** Department should be haunted by that fact.

> FN81.*See generally Ameriphone,* 27 CIT at ---, n. 9, 288 F.Supp.2d at 1359 n. 9 (noting that, because relatively few denials are challenged in court, "the claims of many workers may *never* have been the subject of thorough investigation; and, obviously, some percentage of those claims were meritorious."); "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 805 n. 39 (same).
>
> This analysis understates the full magnitude of the situation, because it considers only the problems in the Labor Department's handling of those TAA petitions that are actually filed with the agency. This analysis thus takes no account of the untold numbers of workers who never even apply for TAA benefits-a phenomenon which commentators attribute to, *inter alia,* the agency's failure to conduct outreach and adequately publicize the TAA program. *See, e.g.,* Kletzer & Rosen at 324 ("Over the last 40 years, the DOL has performed very limited public outreach to inform employers, workers, and communities of the existence of TAA."), 328 (citing 2004 GAO report which found that "many workers are unaware of TAA and that they are eligible to receive assistance under the program.... The DOL has not to date performed any major outreach-for example, using television and radio-to publicize the program.... [M]ore resources need to be devoted to informing workers about TAA and other forms of assistance for dislocated workers.").

III. *Conclusion*

The TAA system is fundamentally broken, as

evidenced by a number of key indicators-particularly the relatively high number of requests for voluntary remands in cases that are appealed to the court, and the extraordinarily high percentage of cases in which the agency reverses itself on appeal. Those statistics are a scathing indictment of the Labor Department's administration of the TAA program.

In short, "[t]here is something fundamentally wrong with the administration of the nation's trade adjustment assistance programs if, as a practical matter, workers often must appeal their cases to the courts to secure the thorough investigation that the Labor Department is obligated to conduct by law." *Ameriphone*, 27 CIT at ----, 288 F.Supp.2d at 1359 (footnote omitted). Moreover, the relatively high number of requests for voluntary remands in TAA cases indicates that even the Government recognizes that the Labor Department is "routinely failing to 'conduct [its] investigation with the utmost regard for the interests of the petitioning workers' and to 'marshal all relevant facts' before making its determinations."*See Ameriphone*, 27 CIT at ----, 288 F.Supp.2d at 1359 (*quoting Stidham*, 11 CIT at 551, 669 F.Supp. at 435;29 C.F.R. § 90.12).

To be sure, the statute does not entitle every petitioning worker to be certified as eligible to apply for TAA benefits. *See generally United Glass and Ceramic Workers*, 584 F.2d at 400 & n. 7, 407. But every worker *is* entitled to a thorough agency investigation of his or her claim-without being forced to resort to the courts. The law mandates no less. *Ameriphone*, 27 CIT at ----, 288 F.Supp.2d at 1359-60;29 C.F.R. § 90.12.[FN82]

> FN82.*Cf. UAW v. Marshall*, 584 F.2d at 397-98 (remanding case to Labor Department, emphasizing that "[e]ven if a more detailed inquiry does not change the result in this case, the class of those seeking or considering adjustment assistance will be afforded (1) a description of the circumstances that the [agency] believes mandate the choice of the plant as the appropriate subdivision and (2) an explanation why [the agency] holds that opinion.").

In this respect, the issue is not whether the Labor Department's determination in a particular case is *eventually* upheld; rather, the issue is the adequacy of the *initial investigation at the agency level.* The Labor Department's need to request a voluntary remand when a case is appealed to the courts is, in essence, a confession of error on the part of the agency.[FN83] And, when a remand is required, the agency is not vindicated simply because the ultimate result may not change-although, as discussed in section II.E above, in a stunning percentage of cases, the result in fact *does* change. That fact alone casts a long shadow over the hundreds of negative determinations that the Labor Department issues each year but which never find their way into court.

> FN83. As *Chevron III* observed: "The relatively high number of requests for voluntary remands [in TAA cases] ... speaks volumes about the calibre of the Labor Department's investigations in general, and the Government's ability to defend [those investigations]" on appeal. *Chevron III*, 27 CIT at ----, 298 F.Supp.2d at 1348.

***1355** As the nation prepares to mark yet another Labor Day in tribute to hardworking men and women all across the country, and as Congress and the Executive Branch look toward next year's debate on the renewal of Trade Promotion Authority for the President, it is well to remember that TAA is designed to be a "hand up," not a "hand out." [FN84] The very purpose of the TAA program is to provide retraining and other employment assistance to U.S. workers whose jobs have been sacrificed-in the national interest, and for the greater good of the country-on the altar of free trade. As one scholar recently put it, "Trade is a little bit like war.... Fighting World War II [was] a good thing. It[ ] [was] good for the world, and ... good for the United States. But for the people who got killed, it was clearly bad. That's what trade is like." *Harper's Magazine* at 62 (*quoting* Professor Robert LaLonde of the University of Chicago).

> FN84. A recent *Wall Street Journal* article made the point that the TAA program must have teeth if it is to be anything more than a salve for the consciences of proponents of free trade:
>
> Calling attention to workers hurt by trade is uncomfortable for free traders. They

> prefer to focus on benefits of low-cost imports and high-paying export jobs. But the only way to persuade the public and politicians not to erect barriers to globalization and trade is to equip young workers to compete and protect older workers who are harmed. Creating programs with a few votes in Congress, and then botching the execution, doesn't help.
>
> David Wessel, "Aid to Workers Hurt by Trade Comes in Trickle," *Wall Street Journal*, Aug. 11, 2005, at A2.

The analogy is an apt one. And, much as Congress has charged the U.S. Department of Veterans Affairs (formerly the "Veterans Administration") ("VA") with caring for those who have risked life and limb for our freedom,[FN85] so too Congress has entrusted to the Labor Department the responsibility for providing training and other re-employment assistance to those who have paid for our place in the global economy with their jobs. *Compare, e.g.*, 38 U.S.C. § 5103A (captioned "Duty to assist claimants," obligating VA to "make reasonable efforts to assist a claimant in obtaining evidence necessary to substantiate the claimant's claim" for veterans' benefits) [FN86] *with* 29 C.F.R. § 90.12 ***1356** (Labor Department is obligated to "marshal all relevant facts" in making its TAA determinations). *See also Woodrum v. Donovan*, 4 CIT at 55, 544 F.Supp. at 208-09 ("the [TAA statute] requires the Secretary of Labor to conduct an investigation of each properly filed petition"); *Int'l Molders and Allied Workers' Union*, 643 F.2d at 31 ("[b]ecause of the *ex parte* nature of the certification process, and the *remedial purpose* of the [TAA] program," Labor Department is obligated to "conduct [its] investigation with *the utmost regard* for the interest of the petitioning workers") (emphases added); *IBM I*, 29 CIT at ----, 387 F.Supp.2d at 1351 (rejecting Labor Department's argument that because the workers did not allege certain facts, agency was not obligated to make further inquiry, and holding that-to the contrary-"*it is incumbent upon Labor to take the lead* in pursuing the relevant facts") (emphasis added); *Hawkins Oil & Gas II*, 17 CIT at 129, 814 F.Supp. at 1114 (Labor Department "has an *affirmative duty* to investigate" whether petitioning workers are eligible for TAA benefits) (citations omitted) (emphasis added); *Sun Apparel I*, 28 CIT at ----, 2004 WL 1875062 at * 6 ("Labor is under a *mandatory duty* to 'conduct an investigation into each properly filed petition' ") (citation omitted) (emphasis added); *Ameriphone*, 27 CIT at ----, 288 F.Supp.2d at 1359 (Labor Department "has an *affirmative obligation* to conduct its own independent 'factual inquiry into the nature of the work performed by the petitioners' "); *Chevron I*, 26 CIT at 1284-85, 245 F.Supp.2d at 1327-28 (same).[FN87]

FN85. In the words of President Abraham Lincoln, the mission of the U.S. Department of Veterans Affairs is "to care for him who shall have borne the battle, and for his widow and his orphan." Abraham Lincoln (March 4, 1865).

FN86. *See generally Karnas v. Derwinski*, 1 Vet.App. 308, 313 (1991) ("duty-to-assist" and "benefit-of-the-doubt" doctrines embodied in VA law "spring from a general desire to protect and do justice to the veteran who has, often at great personal cost, served our country"), *overruled on other grounds, Kuzma v. Principi*, 341 F.3d 1327, 1328-29 (Fed.Cir.2003).

See also Littke v. Derwinski, 1 Vet.App. 90, 91-92 (1991) (characterizing "VA's duty to assist the veteran in developing the facts pertinent to his or her claim" as the "cornerstone of the veterans' claims process," and emphasizing that "[t]he 'duty to assist' is neither optional nor discretionary"); *Godwin v. Derwinski*, 1 Vet.App. 419, 425 (once veteran presents plausible claim, burden shifts to VA to assist veteran in developing *"all* relevant facts, not just those for or against the claim"); *Murincsak v. Derwinski*, 2 Vet.App. at 370 (same); 38 C.F.R. § 3.103(a) (VA Statement of Policy, which acknowledges: "Proceedings before VA are *ex parte* in nature, and it is the obligation of VA to assist a claimant in developing the facts pertinent to the claim and to render a decision which grants every benefit that can be supported in law while protecting the interests of the Government.").

As *Littke* correctly observes:

> By assisting the claimant in developing pertinent facts, from whatever source, ... the VA will more adequately fulfill its statutory and regulatory duty to assist the veteran. A well developed record will ensure that a fair, equitable and procedurally correct decision on the veteran's claim for benefits can be made.

Littke, 1 Vet.App. at 92. The same can be said of the Labor Department in TAA cases.

FN87. *Cf. Former Employees of Sonoco Products Co. v. Chao*, 372 F.3d 1291, 1296-99 (Fed.Cir.2004) (discussing "paternalistic relationship" between VA and veterans, and rejecting notion "that a similar paternalistic relationship would be required to make it possible for Department of Labor employees to mislead an applicant" so as to warrant application of doctrine of equitable tolling in TAA cases).

As discussed above, the Labor Department's TAA mandate *vis-a-vis* trade-impacted workers is much like the VA's mandate *vis-a-vis* veterans of the armed services. The Labor Department suffers by comparison to other federal agencies as well.

For example, the U.S. Department of Commerce recently established an antidumping and countervailing duty "petition counseling and analysis unit," to help U.S. companies avail themselves of the protections of U.S. trade laws against unfair import competition. *See* "Commerce Establishes Petition Counseling Unit," BNA Int'l Trade Reporter, Sept. 30, 2004, at 1611. Thus, even as the Labor Department continues to default on its obligation to adequately *investigate* TAA petitions filed by *individual workers* (who are generally, by definition, unemployed), the Commerce Department has extended its mission (beyond the *investigation* of petitions) by creating a dedicated unit staffed by agency personnel with "a tremendous amount of experience," to affirmatively assist *companies* in the *filing* of petitions-working with those companies to "ensur[e] [that] their [antidumping and countervailing duty] petition[s] compl[y]" with statutory standards, and providing them with tariff and trade data to support their petitions. *Id.*

(The Labor Department's website does indicate that "[p]etitioners may request assistance in preparing [their TAA] petition at their [1] local One-Stop Career Center or by contacting their [2] State Dislocated Worker Unit, [3] Employment Security Agency or [4] *the DTAA* [the Labor Department's 'Division of Trade Adjustment Assistance'] in Washington, D.C." (Emphasis added.) It is telling, however, that the Labor Department placed itself dead last on that list of potential resources; and, in any event, the agency's website provides no direct contact information for the DTAA. *See generally* "Certifiably Broken," 7 U. Pa. J. Lab. & Emp. L. at 819 n. 99 (criticizing information provided by Labor Department to assist workers interested in applying for TAA benefits). Moreover, review of the administrative records in TAA cases filed with the court has disclosed no case in which DTAA provided assistance to petitioning workers in the preparation of their petition. Indeed, given that the Labor Department is routinely failing to even properly *investigate* TAA petitions, it is unclear what assistance, if any, the agency could provide to workers in the preparation of their petitions.)

***1357** Congress designed TAA as a *remedial* program, recognizing that petitioning workers would be (by definition) traumatized by the loss of their livelihood; that some might not be highly-educated; that virtually all would be *pro se;* that none would have any mastery of the complex statutory and regulatory scheme; and that the agency's process would be largely *ex parte.*[FN88] Congress did not

intend the TAA petition process to be adversarial. Nor did Congress intend to cast the Labor Department as a "defender of the fund," [FN89] passively sitting in judgment, ruling "thumbs up" or "thumbs down" on whatever evidence petitioning workers might manage to present.

> FN88.*See, e.g.,* McCarthy at 15 ("In trade adjustment assistance cases, the administrative proceedings are *ex parte* in nature. The petitioners are usually unrepresented by counsel.").
>
> FN89.*Compare*38 C.F.R. § 3.103(a) ("it is the obligation of VA ... to render a decision *which grants every benefit that can be supported in law while protecting the interests of the Government"*) (emphasis added).

Quite to the contrary, the Labor Department is charged with an *affirmative* obligation to *proactively* and thoroughly investigate all TAA claims filed with the agency-and, in the words of its own regulations, to "marshal all relevant facts" to make its determinations.[FN90]*See*29 C.F.R. § 90.12. Indeed, the agency's investigative role is pivotal. Only the Labor Department can adequately safeguard the rights of the country's displaced workers. *See, e.g., IBM I,* 29 CIT at ----, 387 F.Supp.2d at 1351 (observing that petitioning workers cannot reasonably be expected to have knowledge of the "sometimes esoteric criteria" for TAA certification).[FN91]

> FN90. "Marshal" is a verb with a very active, orderly-indeed, militant and militaristic-connotation. Its synonyms include "mobilize," "muster," "rally," and "deploy." *See, e.g.,* Roget's II: The New Thesaurus, Third Edition (2003).
>
> FN91.*Cf. Akles v. Derwinski,* 1 Vet.App. 118, 121 (1991) (rejecting as absurd and inconsistent with agency's "duty to assist" the VA's argument that a claimant should be obligated to "specify with precision the statutory provisions or the corresponding regulations under which he is seeking benefits"; contrary to agency's contention, *claimants should not be required "to develop expertise in laws and regulations on veterans benefits* before receiving any compensation") (emphasis added).

If the Labor Department shirks its investigative duties, the TAA program is doomed to fail. True, some few companies and union "locals" may be motivated by a sense of corporate or social responsibility to take the initiative and actively assist displaced workers in filing TAA claims and proving their cases. But many-if not most-employers have neither the inclination nor the resources to do so.[FN92] And organized labor basically *wants* TAA to fail. [FN93]

> FN92.*See generally* section II.B, *supra* (cataloguing various motivations for employers' failures to cooperate in TAA investigations). *But cf. Ericsson I,* 28 CIT at ----, ----, 2004 WL 2491651 at **3-4, 7 (representative of employer filed the TAA petition on behalf of workers, although she subsequently failed and refused to cooperate with investigation).
>
> FN93.*See generally* n. 3, *supra* (discussing organized labor's antipathy to TAA).

In this case, as in so many other TAA cases appealed to the court in recent years, the Workers' persistence ultimately paid off. However belatedly, the Labor Department eventually certified them as eligible to apply for TAA benefits. Yet it would be a grave mistake to characterize this as a case where the system "worked."

Congress never intended the process of petitioning for TAA benefits to be a war of attrition. There is no "happy ending" here. The extreme tardiness of the Labor ***1358** Department's affirmative determination robbed it of much of its practical value to the Workers and other former BMC employees. But, for whatever relief it has yet afforded those who need and deserve it, the agency's Revised Determination on Remand is hereby sustained. *See*69 Fed.Reg. 76,783 (Dec. 22, 2004).

Judgment will enter accordingly.

CIT,2006.
Former Employees of BMC Software, Inc. v. U.S. Secretary of Labor

454 F.Supp.2d 1306, 28 ITRD 2159

END OF DOCUMENT

Attachment 2

19 U.S.C. § 2272

(a) In general

A group of workers (including workers in any agricultural firm or subdivision of an agricultural firm) shall be certified by the Secretary as eligible to apply for adjustment assistance under this part pursuant to a petition filed under section 2271 of this title if the Secretary determines that—

(1) a significant number or proportion of the workers in such workers' firm, or an appropriate subdivision of the firm, have become totally or partially separated, or are threatened to become totally or partially separated; and

(2)(A)(i) the sales or production, or both, of such firm or subdivision have decreased absolutely;

(ii) imports of articles like or directly competitive with articles produced by such firm or subdivision have increased; and

(iii) the increase in imports described in clause (ii) contributed importantly to such workers' separation or threat of separation and to the decline in the sales or production of such firm or subdivision; or

(B)(i) there has been a shift in production by such workers' firm or subdivision to a foreign country of articles like or directly competitive with articles which are produced by such firm or subdivision; and

(ii)(I) the country to which the workers' firm has shifted production of the articles is a party to a free trade agreement with the United States;

(II) the country to which the workers' firm has shifted production of the articles is a beneficiary country under the *Andean Trade Preference Act* [19 U.S.C. 3201 et seq.], *African Growth and Opportunity Act* [19 U.S.C. 3701 et seq.], or the *Caribbean Basin Economic Recovery Act* [19 U.S.C. 2701 et seq.];

or

(III) there has been or is likely to be an increase in imports of articles that are like or directly competitive with articles which are or were produced by such firm or subdivision.

(b) Adversely affected secondary workers

A group of workers (including workers in any agricultural firm or subdivision of an agricultural firm) shall be certified by the Secretary as eligible to apply for trade adjustment assistance benefits under this part if the Secretary determines that—

(1) a significant number or proportion of the workers in the workers' firm or an appropriate subdivision of the firm have become totally or partially separated, or are threatened to become totally or partially separated;

(2) the workers' firm (or subdivision) is a supplier or downstream producer to a firm (or subdivision) that employed a group of workers who received a certification of eligibility under subsection (a) of this section, and such supply or production is related to the article that was the basis for such certification (as defined in subsection (c)(3) and (4) of this section);

and

(3) either—

(A) the workers' firm is a supplier and the component parts it supplied to the firm (or subdivision) described in paragraph (2) accounted for at least 20 percent of the production or sales of the workers' firm; or

(B) a loss of business by the workers' firm with the firm (or subdivision) described in paragraph (2) contributed importantly to the workers' separation or threat of separation determined under paragraph (1).

(c) Definitions

For purposes of this section—

(1) The term "contributed importantly" means a cause which is important but not necessarily more important than any other cause.

(2)(A) Any firm, or appropriate subdivision of a firm, that engages in exploration or drilling for oil or natural gas shall be considered to be a firm producing oil or natural gas.

(B) Any firm, or appropriate subdivision of a firm, that engages in exploration or drilling for oil or natural gas, or otherwise produces oil or natural gas, shall

be considered to be producing articles directly competitive with imports of oil and with imports of natural gas.

(3) Downstream producer.—The term "downstream producer" means a firm that performs additional, value-added production processes for a firm or subdivision, including a firm that performs final assembly or finishing, directly for another firm (or subdivision), for articles that were the basis for a certification of eligibility under subsection (a) of this section of a group of workers employed by such other firm, if the certification of eligibility under subsection (a) of this section is based on an increase in imports from, or a shift in production to, Canada or Mexico.

(4) Supplier.—The term "supplier" means a firm that produces and supplies directly to another firm (or subdivision) component parts for articles that were the basis for a certification of eligibility under subsection (a) of this section of a group of workers employed by such other firm.[40]

[40] 19 U.S.C. § 2272.

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Attachment 3: Example of Letter from Employment and Training Administration Notifying TAA Applicant that Eligibility Has Been Denied

U.S. Department of Labor

Employment and Training Administration
200 Constitution Avenue, NW.
Washington, DC. 20210

November 7, 2007

TA-W-62,243

Patrick Donovan
P. O. Box 055
Trenton, NJ 08625

Dear Sir:

This is to inform you that, pursuant to Section 223, of the Trade Act of 1974, the U.S. Department of Labor has issued a **Negative Determination Regarding Eligibility to Apply for Worker Adjustment Assistance.** In this case it was concluded that at least one of the group **eligibility requirements** of Section 222 of the Trade Act has not been met.

In addition, under Section 246 of the Trade Act of 1974, as amended, the U.S. Department of Labor has determined that this worker group is also **denied Eligibility to Apply for Alternative Trade Adjustment Assistance (ATAA).** Workers denied eligibility for worker adjustment assistance cannot be certified for ATAA. Enclosed is a copy of the Department's decision.

Under the Trade Act of 1974, as amended, workers whose petition for TAA or ATAA has been denied may request administrative reconsideration within 30 days after the publication of the determination in the Federal Register (http://www.gpoaccess.gov/fr/index.html). The application for reconsideration must be in writing, include the petition number (TA-W-), company name, location, and a description of the group of workers covered by the petition. Your request must provide a statement of reasons for believing that the Department's decision is wrong, specifically addressing the criterion for which the workers were denied. You may present any supporting documentation or evidence you have to support your request. You must sign the request and include your address and telephone number. Requests for reconsideration may be submitted by mail or fax to:

U.S. Department of Labor
Employment and Training Administration
Director, Division of Trade Adjustment Assistance
200 Constitution Avenue, NW, Room C-5311
Washington, DC 20210
Fax: 202-693-3584 or 3585

You are encouraged to contact your local One-Stop Career Center office to find out about training and reemployment services available to dislocated workers under the Workforce Investment Act (WIA). You may call a toll free help line to obtain the address of the One-Stop office nearest you. The toll free number is 1-877-US2-JOBS.

Sincerely,

Ralph DiBattista
Director
Division of Trade Adjustment Assistance

Enclosure

U.S. Department of Labor

Employment and Training Administration
200 Constitution Avenue, NW
Washington, DC 20210

November 7, 2007

TA-W-62,243

Carla Walsh
Manager, Human Resources
Electric Mobility Corp.
591 Mantua Blvd.
Sewell, NJ 08080

Dear Ms. Carlo:

This is to inform you that, pursuant to Section 223, of the Trade Act of 1974, the U.S. Department of Labor has issued a **Negative Determination Regarding Eligibility to Apply for Worker Adjustment Assistance.** In this case it was concluded that at least one of the group **eligibility requirements** of Section 222 of the Trade Act has not been met.

In addition, under Section 246 of the Trade Act of 1974, as amended, the U.S. Department of Labor has determined that this worker group is also **denied Eligibility to Apply for Alternative Trade Adjustment Assistance (ATAA).** Workers denied eligibility for worker adjustment assistance cannot be certified for ATAA. Enclosed is a copy of the Department's decision.

Under the Trade Act of 1974, as amended, workers whose petition for TAA or ATAA has been denied may request administrative reconsideration within 10 days after the publication of the determination in the Federal Register (http://www.gpoaccess.gov/fr/index.html). The application for reconsideration must be in writing, include the petition number (TA-W-), company name, location, and a description of the group of workers covered by the petition. Your request must provide a statement of reasons for believing that the Department's decision is wrong, specifically addressing the criterion for which the workers were denied. You may present any supporting documentation or evidence you have to support your request. You must sign the request and include your address and telephone number. Requests for reconsideration may be submitted by mail or fax to:

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Sincerely,

Ralph DiBattista
Director
Division of Trade Adjustment Assistance

Enclosure

BIOGRAPHY FOR FRANK H. MORGAN

Frank H. Morgan is an associate with White & Case LLP's International Trade Group with an active practice in injury investigations before the U.S. International Trade Commission (ITC), anti-dumping and countervailing duty investigations before the U.S. Department of Commerce and in related trade litigation and appeals before the U.S. Court of International Trade and the U.S. Court of Appeals for the Federal Circuit.

Mr. Morgan has represented manufacturers from numerous countries in a wide and diverse array of industries, including paper, lumber, steel, fertilizers, and agricultural goods. Mr. Morgan has served as a member of the Court of International Trade's planning committee for the 13th and 14th Judicial Conferences and has spoken on trade law issues to industry groups and professional organizations.

Prior to joining White & Case LLP, Mr. Morgan served as a law clerk to the Honorable Judith M. Barzilay, Judge, U.S. Court of International Trade from 1998–2000. From 1997–1998, Mr. Morgan worked in the Office of the General Counsel of the ITC.

Publications

"Tips for the New Practitioner at the U.S. Court of International Trade," Georgetown University Law Center Continuing Legal Education Seminar Materials, *Trade and Customs Law Refresher,* January 2007

Bars and Courts

District of Columbia Bar, 2000

Virginia State Bar, 1998

U.S. Court of Appeals for the Federal Circuit

U.S. Court of Appeals for the Fourth Circuit

U.S. Court of International Trade

Education

B.A., Villanova University, 1995

J.D., Columbus School of Law, Catholic University of America, *cum laude,* 1998

Chairman MILLER. Thank you, Mr. Morgan.

Mr. Rosen.

STATEMENT OF MR. HOWARD F. ROSEN, VISITING FELLOW, THE PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS; EXECUTIVE DIRECTOR, THE TRADE ADJUSTMENT ASSISTANCE COALITION

Mr. ROSEN. Thank you very much, Mr. Chairman, for the invitation this morning to discuss this very important issue.

The U.S. economy faces intense competition from at home and abroad, and although this competition has its benefits, it places significant costs on American workers and their families, firms, and communities.

Approximately 16 million jobs are terminated each year of which four million result in serious unemployment. Although the probability that a worker will become unemployed has declined, the duration of unemployment has actually increased.

Approximately 700,000 firms go out of business each year, affecting six million workers. An additional 1.7 million firms contract each year, affecting another 11.8 million jobs. About 40 percent of dislocated workers do not find a job within a year or two after their layoff. Another 40 percent who find jobs actually experience long-term earning losses. Forty-five counties representing a half a million workers have unemployment rates twice the national average currently, and 20 metropolitan areas currently have unemployment rates 50 percent higher than the national average. Of these, 13 are

in California, two are in Michigan, and one in each New Jersey, Washington, Florida, North Carolina, and Arizona.

And finally, federal spending on training and employment and community development, as a share of GDP, has fallen sharply over the last 20 years. The country does not have a national, coherent, comprehensive strategy to deal with these economic dislocations. Instead, we have a collection of disparate, ad hoc, and inadequate programs that tend to provide assistance too little, too late.

As a result, efforts to expand economic liberalization and introduce new technologies are facing significant political backlash. Over the long run reluctance to embrace economic flexibility will cost U.S. economic growth and seriously affect U.S. living standards.

If I could, let me just give you some examples of some of the problems that we have with our existing programs. Currently, only one-third of unemployed workers actually receive unemployment insurance. If you are lucky enough to receive that unemployment insurance, it replaces only one-third of your previous wage, and one-third of unemployed people who receive unemployment insurance exhaust their assistance before they find a new job.

As you have heard, there are targeted programs like the Trade Adjustment Assistance Program, and I commend Mr. Morgan for his statements that are really right on. The program, though, for those people who receive it, is quite effective. The problem is only a minority of workers receive that assistance.

Programs designed to assist firms respond to competitive pressures such as the Manufacturing Extension Partnership and the Trade Adjustment Assistance Program for Firms, are also effective, but their funding is minuscule. The Department of Defense provides comprehensive assistance to communities that are hurt by military base closings, but there is no equivalent program for civilian dislocations.

I am, therefore, this afternoon calling for a national economic adjustment rapid response as part of the country's broader competitiveness strategy. This national economy adjustment rapid response would be based on the following elements: comprehensive assistance to workers, firms, and communities; assisting everyone in need regardless of cause of dislocation; flexible, not one-size-fits-all; based on early intervention; and coordinating public and private assistance.

Let me give you some examples. Instead of providing workers a one-size-fits-all list of assistance so that they must take it or leave it, we would provide a menu of assistance to workers which would include, in addition to income maintenance and training, possibly wage insurance and a tax credit to maintain their health insurance during their period of unemployment. We could expand and build on the Manufacturing Extension Partnership and the Trade Adjustment Assistance Program for Firms and apply the base-closing model to civilian economic dislocations.

In conclusion, I just want to state some very basic facts. Number one, we do not live in a textbook. Markets are not perfect. The labor markets are also not completely flexible. There are transition costs. Unfortunately, many economists tend to ignore those transi-

tion costs. By contrast, I think that much of public policy is actually made to address transition costs.

The debate is not over should we act or not. That debate was settled decades ago. The question is what kind of assistance do we provide and who should we assist. The challenge is designing government assisted programs that are cost effective and appropriate.

Mr. Chairman, the Bear Stearns Adjustment Program could potentially cost the American taxpayers $30 billion, many multiples of the amount that the government currently spends to help workers, firms, and communities. If we can devote this many resources to save one financial institution, certainly we can find the resources to assist workers, firms, and communities throughout the country facing severe economic dislocation.

I look forward to the discussion. Thank you.

[The prepared statement of Mr. Rosen follows:]

PREPARED STATEMENT OF HOWARD F. ROSEN

Designing a National Strategy for Responding to Economic Dislocation

The U.S. economy faces intense competition from home and abroad. Although increased competition may benefit the economy through access to more, better and less expensive products and services, it places significant costs on American workers and their families, firms and communities. These costs are exacerbated by the lack of a national comprehensive strategy to deal with these economic disruptions. In place of a national strategy, there is a collection of ad hoc, out-of-date and inadequate programs that provide too little assistance too late to those in need. As a result, efforts to expand economic liberalization and introduce new technologies in the economy are facing significant political backlash. Over the long run, reluctance to embrace economic flexibility may result in lower economic growth and risk long-term improvements in U.S. living standards.

American workers, their families, firms and communities experience significant dislocations every day:

- Between 1995 and 2004, approximately 16 million jobs were terminated each year. (See Figure 1.) Four million terminations resulted in serious unemployment.
- Although the national unemployment rate has been failing over the last several, years, the duration of unemployment has been rising. (Figure 2.)
- No region is exempt from the recent changes in the labor market. There has been a convergence of unemployment rates across all 50 states and the District of Columbia.
- Between 1995 and 2004; approximately 690,000 firms closed each year, affecting 6.1 million workers. An additional 1.7 million firms contracted each year, affecting 11.8 million workers. (See. Figure 3.)
- Between 1996 and 2007 there were on average 16,400 mass layoff plant closings each year, affecting 1.8 million workers.[1] (See Figure 4.)

[1] Layoffs affecting 50 or more workers is considered a mass layoff.

Figure 1
Employment Dynamics, 1993 to 2004

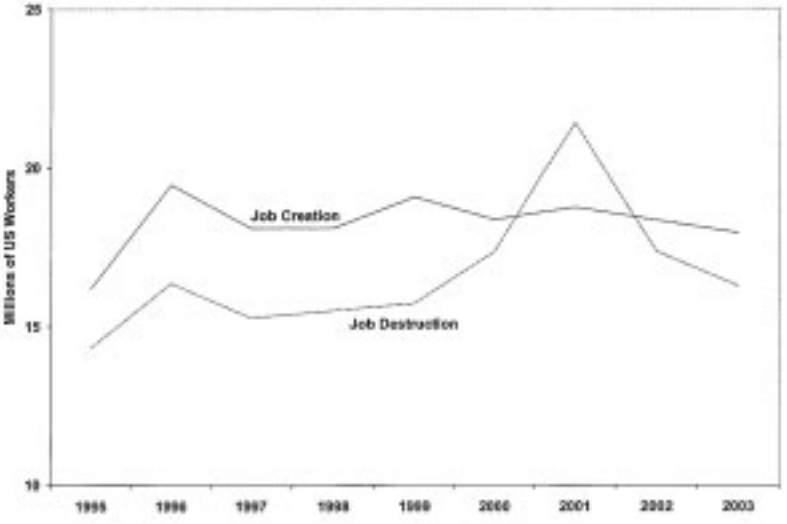


Figure 2
Unemployment Rate and Duration, 1960 to 2007

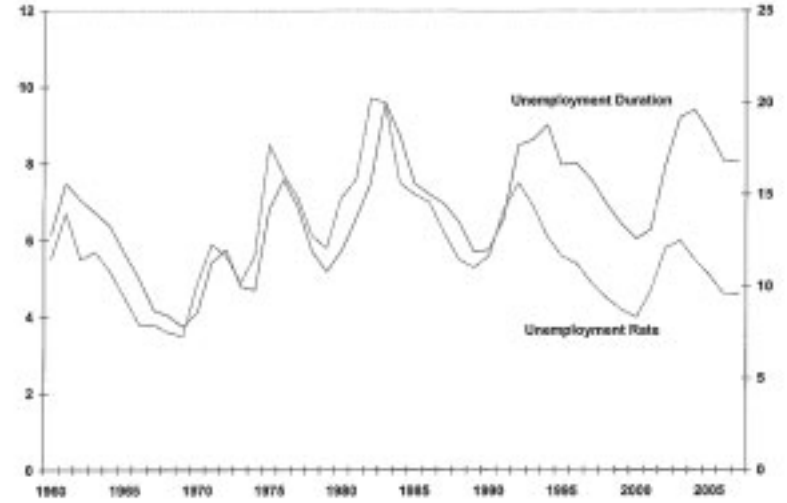


Figure 3
Firm Dynamics, 1995 to 2004

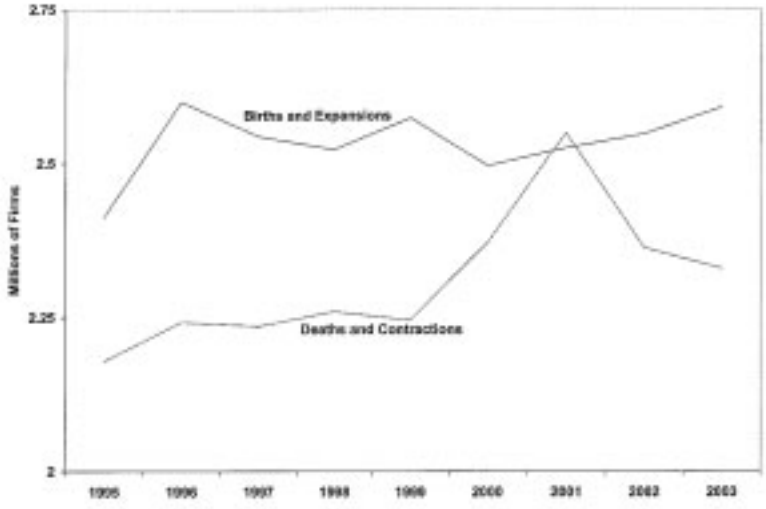
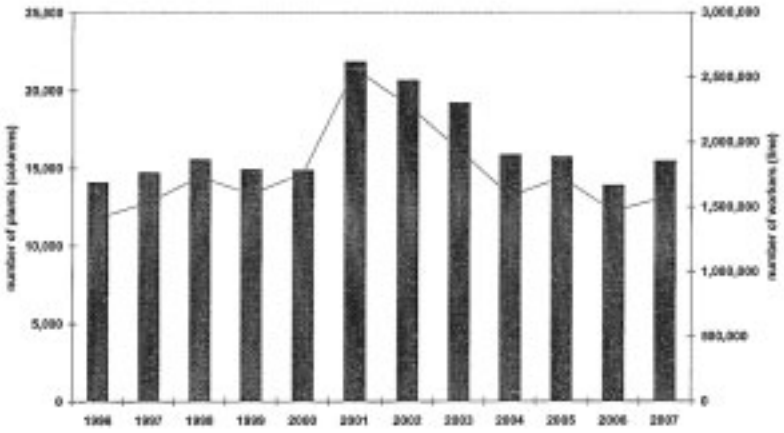


Figure 4
Mass Layoffs, 1996 to 2007



- Forty-five counties, representing one-half million workers, currently have unemployment rates twice the national average.
- Of the 20 metropolitan areas currently 50 percent above the national average unemployment rates, 13 are in California, two are in Michigan and one each in New Jersey, Washington, Florida, North Carolina and Arizona. (See Table 1.)

Table 1
Unemployment Rates
by Metropolitan Statistical Areas, April 2008

Metropolitan Area	Unemployment Rate
El Centro, CA Metropolitan Statistical Area	18.4
Merced, CA Metropolitan Statistical Area	12.3
Yuba City, CA Metropolitan Statistical Area	11.8
Yuma, AZ Metropolitan Statistical Area	11.2
Modesto, CA Metropolitan Statistical Area	10.7
Visalia-Porterville, CA Metropolitan Statistical Area	10.3
Hanford-Corcoran, CA Metropolitan Statistical Area	10.2
Fresno, CA Metropolitan Statistical Area	10
Bakersfield, CA Metropolitan Statistical Area	9.7
Madera, CA Metropolitan Statistical Area	9.6
Stockton, CA Metropolitan Statistical Area	9.6
Flint, MI Metropolitan Statistical Area	9.3
Redding, CA Metropolitan Statistical Area	9.2
Ocean City, NJ Metropolitan Statistical Area	8.6
Salinas, CA Metropolitan Statistical Area	7.9
Longview, WA Metropolitan Statistical Area	7.7
Palm Coast, FL Metropolitan Statistical Area	7.6
Rocky Mount, NC Metropolitan Statistical Area	7.6
Chico, CA Metropolitan Statistical Area	7.4
Saginaw-Saginaw Township North, MI Metropolitan Statistical Area	7.3

Workers are the first to feel the negative consequences of economic restructuring due to increased domestic and international competition. They may be asked to cut back their hours, accept lower wages and/or benefits, or ultimately lose their jobs. Lori Kletzer finds that almost 40 percent of displaced workers do not find new jobs within a year or two after their initial job loss.[2] (See Figure 5.) Although 40 percent of workers find new jobs, their new jobs pay less than their previous ones. Only a little more than 20 percent of displaced workers find new jobs that pay as much or more than their previous jobs.

Job loss can place enormous strain on household finances. The Congressional Budget Office reports that Unemployment Insurance (UI) played a significant role in maintaining family incomes of recipients who experienced long-term spells of unemployment, particularly for those families that had only one wage earner. Before becoming unemployed, recipients' average family income was about $4,800 per month. UI helped offset the reduction in average family income by 20 percent points.[3]

[2] Kletzer, Lori, *Job Loss from Imports: Measuring the Costs,* Washington, D.C.: Institute for International Economics, 2001.

[3] Long-term recipients are defined in this report as unemployed workers who received UI benefits for a spell of at least four consecutive months, in 2001 or early 2002.

Figure 5
Worker Adjustment Burden

These pressures are not restricted to those workers employed in industries that directly face increased domestic and international competition. Workers employed in up-stream and down-stream industries may also experience economic dislocation as a result of the effect of increased competition on final goods-producing and service-providing industries. For example, in addition to its production workers, an apparel plant closing might affect textile workers, as well as maintenance and food service workers, designers, cutters, sales representatives and accountants associated with the production of apparel. Depending on the number of workers laid off from the apparel plant, there may also be a third ripple effect on the broader community. Communities with a high concentration of industry may experience further cutbacks and job losses, as workers and their families spend less money on consumer goods and services.

Job loss is not restricted to production workers. Firm closures can also affect white-collar management workers. Although these workers tend to be more highly educated and earn higher incomes than production workers, their adjustment to economic dislocation can also be costly. Limited job opportunities in the local community may require these workers to move, causing significantly disruptions to their families.

Mass layoffs and plant closings, and the associated drops in household disposable income, can also hurt a community's tax base, having implications for the provision of government services, including schools, transportation and health care. In summary, what starts as a "limited" lay off or plant closing affecting a select group of workers can very easily result in successive ripple effects with consequences on an entire community.

Current Policy Responses to Economic Dislocation

Existing government programs designed to cushion the effects of economic dislocation are, for the most part, out-of-date, ad hoc and inadequate. These programs are often targeted to assist select groups of workers or communities that have some political importance. Overall, these programs are not part of any comprehensive or co-

herent strategy. This "segmentation "of assistance is not a new phenomenon. Early examples include assistance programs for workers employed by Studebaker, the railroad industry and the meat packing industry in the 1960s.[4]

Many targeted programs are designed to "compensate" workers deemed to be adversely affected by changes in discrete policies, in order to reduce opposition to those changes. The largest example is Trade Adjustment Assistance (TAA), which was established in 1962 and subsequently expanded as part of Congressional approval of negotiations to liberalize trade. Other examples include targeted programs to assist workers affected by the *Clean Air Act* and legislation to protect Spotted Owls. Congress in currently considering establishing a program to assist workers potentially adversely-affected by policies aimed at reducing greenhouse gas emissions.

Although there may be a political motivation for these targeted programs, the economic justification for them may not be as compelling. There is not much evidence that the adjustment burden placed on workers covered by these targeted programs is significantly different from that experienced by other dislocated workers. In addition to discriminating between groups of workers, these programs create a bureaucratic maze, making it harder for worker to get the assistance they desperately need.

For example, the *Catalogue of Federal Domestic Assistance* lists 52 programs under the category of "Economic Development," 44 programs under "Community Development" and 60 programs under "Job Training and Employment."[5] Although the information included in the catalogue is extremely useful, the catalogue is difficult to navigate and the material is written at a highly technical level. A more brief and use-friendly version of this catalogue could provide invaluable assistance to workers, their families, firms and communities facing economic dislocations.

The following are examples of some of the more well known programs designed to assist workers, firms and communities adjust to economic dislocation.

Worker assistance

Unemployment Insurance

Despite significant changes in U.S. labor market conditions there have been no major changes in the basic structure of UI since it was established 70 years ago. As a result, UI does not currently meet its initial goals, leaving millions of workers without the assistance they desperately need.[6]

UI's original goals were to smooth a worker's income stream by providing income support during periods of unemployment, to provide insurance against the risk of job loss, and to serve as counter-cyclical stimulus during periods of economic downturns.

Although a federal entitlement, UI is administered by the states, allowing each state to set its own program parameters. On average, workers can receive up to 26 weeks of benefits. The national average weekly benefit in 2007 was $281.17.

The following program indicators suggest that the current UI program falls short in meeting its initial goals:

- The average recipiency rate, i.e., the percent of unemployed receiving UI, over the past 27 years is approximately 37 percent.
- The average replacement rate between 1975 and 2004; i.e., the amount of assistance relative to a worker's *previous* wage, was 36 percent, far short of the initial goal of 50 percent.[7]
- The exhaustion rate, i.e., the percent of workers who exhaust their benefits before finding new jobs, averaged approximately 30 percent between 1974 and 2007.

Restrictive eligibility criteria constitute a large hole in the existing UI program. The current look back and job tenure provisions, as well as the exclusion of contin-

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[4] Frank Jr., Charles, *Foreign Trade and Domestic Aid,* Washington: The Brookings Institution. 1974.

[5] Executive Office of the President, Office of Management and Budget, *Catalog of Federal Domestic Assistance,* Washington: Government Printing Office, 2008.

[6] Kletzer, Lori G. and Howard F. Rosen, "Reforming Unemployment Insurance for the Twenty-First Century," The Hamilton Project, Discussion Paper 2006–06, Washington: The Brookings Institution, September 2006.

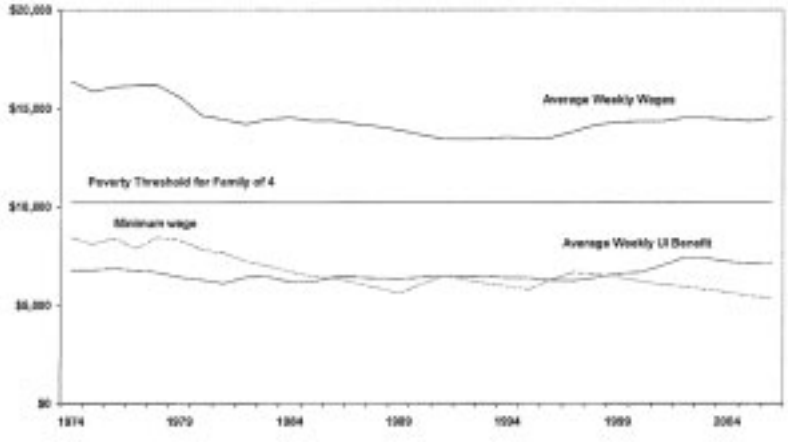
[7] Author's calculations based on Department of Labor data.

gent workers, i.e., temporary and part-time workers, particularly affect low-income workers.[8] Thirty-seven states do not provide dependent payment supplements.

After taking inflation into account, the real value of the national average weekly benefit has not changed much over the last 30 years. Nor has it changed much relative to the poverty threshold or average weekly earnings. It has improved relative to the minimum wage only because that was not increased for a decade.

Figure 6 presents the real annualized value of the national average UI weekly benefit relative to the real annualized value of the hourly minimum wage, the poverty threshold for a family of four adjusted by inflation, and the annualized value of the real average weekly wage for all workers. On average over the last 35 years, the real value of the weekly UI benefit has been about 40 percent below the poverty rate for a family of four adjusted by inflation, and approximately 44 percent of real average weekly earnings.

Figure 6
Comparison of Weekly UI Benefits and Other Income Measures



In 1970, Congress enacted the Extended Benefit (EB) program with automatic triggers to provide assistance in an orderly fashion during periods of high unemployment. Under the current program, UI benefits can be extended for an additional 13 weeks when the unemployment rate reaches a certain level.

Changes in the labor market, combined with the static nature of the triggers, have produced an extended benefit system that is no longer automatic. As a result, Congress has occasionally found it necessary to extend UI through legislation. Although helpful to millions of workers, these temporary stopgap measures politicize UI, thereby undermining one of the initial goals of the program. These temporary programs have proven to be clumsy, typically being enacted after hundreds of thousands of workers have already exhausted their. UI. In.addition, the sunset provisions are arbitrarily set and usually fall before employment has recovered. Overall, the Nation's UI program has become less automatic and more dependent on Congressional action in response to prolonged periods of economic slowdown.

UI is financed by a combination of federal and State payroll taxes. Revenue from the federal payroll tax is used to finance the costs incurred by Federal and State governments in administering the UI program and to cover loans to states that exhaust their regular UI funds. States are required to raise the necessary revenue to finance regular UI benefits paid to their unemployed workers. Currently, federal taxes finance 17 percent of the UI program. The remaining 83 percent is financed by State taxes.

The federal tax established by the *Federal Unemployment Tax Act* (FUTA) is currently 0.8 percent on the first $7,000 of annual salary by covered employers on be-

[8] Some workers associated with temporary placement agencies may receive UI. Twenty states currently do not cover part-time or temporary workers.

half of covered employees. A maximum of $56 is collected annually for each worker who is covered under the program.

There have been few adjustments in the FUTA taxable wage base since it was first established in 1939. The last adjustment was in 1983. Had the taxable wage base been automatically adjusted for inflation over the past 65 years, it would currently be about $45,000.

The following are some proposals to improve UI:[9]

- Shift the determination of eligibility to hours rather than earnings.
- Amend the work test to allow job search for part-time employment.
- Standardize benefit levels to at least half of *lost earnings*.
- Increase the federal taxable wage base, in steps, from $7,000 to $45,000.
- Set a maximum weekly benefit equal to two-thirds of State average weekly earnings.
- Fix the extended benefit triggers so that they are more automatic and workers can receive assistance during economic down-turns without disruption.
- Standard allowances for dependents across all states.
- Provide a Health Coverage Tax Credit (HCTC) similar to the one currently included in the TAA program.

Changes necessary to move UI into the twenty-first century require significant federal leadership. The very basic structure of UI must be reformed, broadening it from the single-employer, full-time worker, temporary layoff model to an approach that accommodates permanent job loss, part-time or contingent work, self-employment, and the incidence of job loss and national, rather than local or regional, unemployment. American workers are currently facing considerable pressure due to corporate restructuring, technological change and increased competition from home and abroad. These pressures are likely to intensify as the economy faces new challenges.

Reforming UI is an important step toward providing workers with the assistance they need to adjust to these challenges.

Training

The *Workforce Investment Act* (WIA), passed in 1998, provides job training and related employment services to unemployed and underemployed individuals. The Act establishes training programs for a wide array of individuals, including, youth, adult, dislocated workers, Veterans, Native Americans. Although all of these programs fall under the responsibility of the federal Department of Labor, they are administered by State and local One-Stop Career Centers. Federal spending on all of these programs was $3.7 billion in FY 2007, of which $1.4 billion was dedicated to dislocated worker training. Of the approximately 260,000 workers who participated in the program in PY 2007, approximately 182,000 workers received core and intensive employment services and only 77,000 enrolled in training.[10]

Although designed to assist all dislocated workers regardless of cause of job loss, the number of participants in WIA programs account for only 6.6 percent of the annual estimate of dislocated workers. In addition, since the program is not an entitlement, there is no guarantee that workers in need will receive training assistance. Training funds are distributed on a "first come, first served" basis, with little regard for a worker's needs.

Trade Adjustment Assistance (TAA)

TAA provides Workers 78 weeks of income maintenance payments, in addition to the traditional 26 weeks of UI, for as long as they participate in training. In addition, the program includes a 65 percent HCTC, a limited wage insurance program, job search and relocation assistance. Under wage insurance, otherwise known as Alternative Trade Adjustment Assistance (ATAA), workers above the age of 50, earning less than $50,000, can receive half of the difference between their old and new wages, for up to two years, subject to a maximum of $10,000. This program is designed to assist the large number of workers who experience earnings losses after re-employment.

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[9] Kletzer, Lori and Howard Rosen, "Reforming Unemployment Insurance for the Twenty-First Century," The Hamilton Project, Discussion Paper 2006, Washington: The Brookings Institution, September 2006.

[10] Budget data are presented according to fiscal year (October to September) and participate data are collected according program year (April to March).

In order to be eligible for TAA, workers must have been laid off from a plant for which at least one of the following three criteria "contributed importantly" to its decline in employment and sales:

- An increase in imports
- Laid off from an upstream or downstream producer
- A shift in production to another country

ATAA and HCTC are two examples of how assistance under the TAA for workers program has shifted from traditional income transfers to more targeted, cost effective assistance. Despite the benefits associated with these new forms of assistance, enrollment in ATAA and the HCTC are disappointingly low. A 2006 GAO study of five large plant closings found that less than half of those TAA eligible workers who visited one-stop career centers were even informed of the HCTC during their visits to one-stop career centers. A little over half of eligible workers were aware of the ATAA program.

One of the gapping holes in the existing program is that it does not cover all service workers. As recent press stories suggest, American service workers are experiencing dislocations due to international outsourcing. Although some service workers, like computer programmers and accountants, have the necessary tools to ease their adjustment from job to job, other workers, like call center operators and data entry clerks may not, making their adjustment more costly. Congress is currently considering proposals to expand TAA eligibility to cover all service workers.

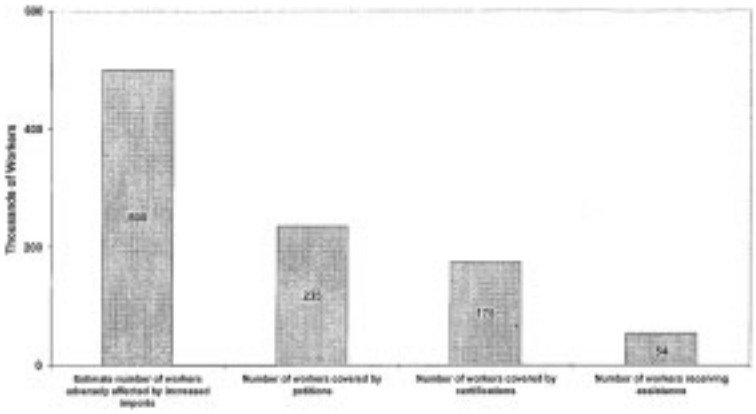
Other reform proposals currently under consideration include:

- Raising the cap on training funds
- Increasing the HCTC from 65 percent to 85 percent
- Expanding ATAA to cover workers over the age of 40 making less than $60,000
- Technical changes to make the program more user-friendly

Although the TAA for workers program has been the subject of some criticism over the years, it has and continues to provide critical assistance to millions of workers and their families as they face probably the most severe financial burden of their lifetime. More than 25 million workers have received assistance under the program since it was established in 1962.

The TAA for workers program works; the problem is that it helps only a minority of potentially affected workers. Only 10 percent of estimated group of potentially eligible workers receive assistance. (See Figure 7.)

Figure 7
TAA Participants, Annual Average, 2002 to 2006

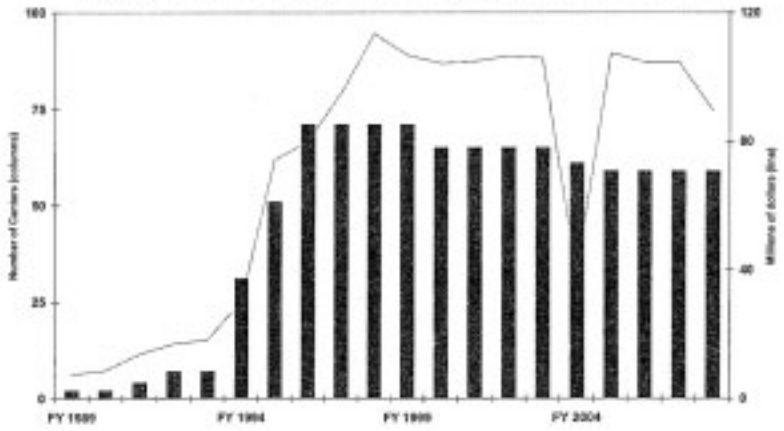


Assistance to Firms

Manufacturing Extension Partnership (MEP)

MEP provides a wide spectrum of services, including business support, technical assistance and training, to manufacturing companies throughout the United States. Presently, the MEP program includes 59 centers with approximately 440 locations serving manufacturing establishments across the country. The Centers are financed through a partnership between Federal and State governments with additional project funding from private industry. The program fosters partnerships with public institutions, including the Small Business Development Centers (SBDC), community colleges, technical colleges and universities, trade associations, local Chambers of Commerce and organizations focused on economic development. The purpose of the program is to improve the productivity and enhance competitiveness of U.S. manufacturers. Despite numerous reports of effectiveness, the program's funding has been low and relatively flat over the last few years. (See Figure 8.)

Figure 8
Manufacturing Extension Partnership Program, FY 1989 to FY 2008



TAA for Firms

Congress established the TAA for Firms program in 1962 to help U.S. firms respond to the pressures resulting from increased import-competition in order to *avoid* possible cutbacks and layoffs. Initially the program provided technical assistance, loans and loan guarantees. Congress eliminated the loans and loan guarantees in 1986. Technical assistance is currently provided to firms by 11 Trade Adjustment Assistance Centers (TAAC) located around the country. Eligibility criteria mirror, although are not exactly the same as those for the TAA for Workers program.

The TAA for Firms program has historically been quite small. Between 2001 and 2006, the program assisted approximately 150 firms a year that employed some 16,000 workers. Average spending over the last nine years has been approximately $11 million per year.

Assistance to Communities

Similar to worker assistance programs, community assistance has tended to be targeted to politically sensitive regions and not widely available to all communities. The best example is a program designed to assist communities adversely affected by military base closings.

Department of Defense (DOD) Office of Adjustment Assistance

The DOD Economic Adjustment program has been successful in helping communities in the aftermath of a military base closing. Under the program, the DOD provides intensive technical assistance and funds to help communities prepare strategic plans for economic development. Economic development specialists are assigned to regions to help local public and private leaders design and implement its strategic

plan. The specialists also help local communities identify and, apply for federal and State assistance.

In 1998, in response to the Levi Strauss plant closing in Roswell, New Mexico, Senator Bingaman initiated a series of steps aimed at assisting the workers and the community modeled after DOD's base closing program.[11] The Levi Strauss plant was Roswell's largest single employer and as a result, the economic impact of the plant closing was felt throughout Roswell and the surrounding communities.

Senator Bingaman's plan included the following elements:

- A committee was established including representatives from State and local government, private industry, unions and other non-profit organizations.
- An economic development specialist from the DOD Office of Adjustment Assistance was assigned to provide technical assistance to the committee in developing and implementing a strategic plan to revitalize the region's economy.
- Senator Bingaman invited representatives from numerous Federal and State government agencies to meet with public and private sector officials in Roswell. The purpose of the meeting was to describe the various government programs designed to assist workers, their families and communities facing economic dislocation.
- The Clinton administration established an interagency working group to provide assistance to the economic redevelopment committee in Roswell, as well as to State and local government officials.

It is difficult to evaluate the impact of these measures, since the effort was disbanded prematurely due to political factors. Individual elements of this initiative have subsequently been tried in response to other plant closings. Congress is currently considering a TAA for Communities program, modeled on Senator Bingaman's efforts in response to the Levi Strauss plan closing in Roswell.

Summary

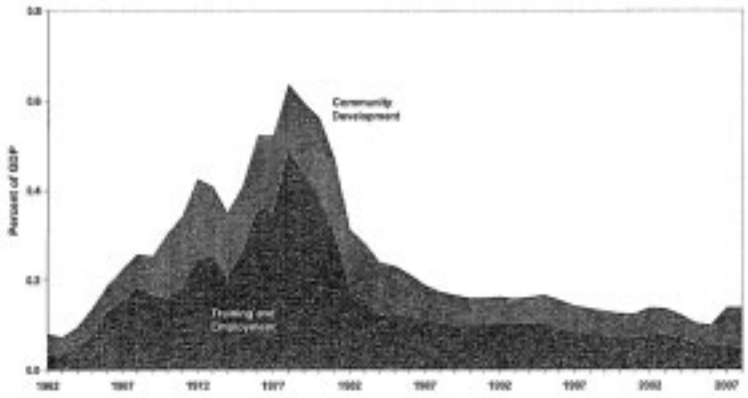
This survey suggests that the United States has a series of ad hoc and underfunded programs that serve only a limited number of workers, firms and communities. Most of the programs are motivated by political considerations, with little economic justification. As a result, these programs discriminate between workers and communities. Although these programs may be effective in winning support for discrete policy changes, they certainly do not constitute a national strategy for responding to economic dislocation, regardless of its cause.

Ironically, funding for most of these programs has declined, despite increased pressures on the U.S. economy, resulting is greater demand for these programs' services. At 0.05 percent of GDP, federal spending on employment and training programs is at its lowest rate in almost 45 years.[12] Federal spending on community development programs was also 0.05 percent of GDP in 2006, down considerably from its peak of 0.18 percent of GDP in 1980. (See Figure 9.)

[11] Rosen, Howard. 2001. A New Approach to Assist Trade-Affected Workers and Their Communities: The Roswell Experiment. *Journal of Law and Border Studies* 1:1.

[12] Federal spending on employment and training peaked at 0.46 percent of GDP in 1978 and 1979.

Figure 9
Federal Spending on Training and Employment and Community Development, 1962 to 2008



The National Economic Adjustment Rapid Response (NEARR)

Developing a comprehensive national strategy to respond to economic dislocation would require four steps:

- Update existing adjustment programs, e.g., UI, to meet the needs of the current workforce.
- Reform existing programs borrowing from effective elements in targeted programs, e.g., TAA.
- Remove discrimination resulting from assistance programs targeted toward select groups of workers.
- Bring all programs under the umbrella of a comprehensive national strategy.

The National Economic Adjustment Rapid Response (NEARR) would be based on the following principles:

- Assist all in need, regardless of cause of dislocation
- Comprehensive assistance to all workers, firms and communities
- Flexible, not "one size fits all" assistance
- Coordinate public and private assistance
- Early intervention

Any response to economic dislocation needs to be built on the foundation of encouraging investment in new or expanding existing plant and equipment, in order to create high skilled, high wage jobs. At 10 percent of GDP, current investment in plant and equipment is significantly below its 50-year trend. (See Figure 10.) Inadequate investment hurts the prospect of raising productivity that in turn affects the creation of high skilled, high wage jobs. Sustainable increases in productivity growth are necessary in order to achieve long-run improvements in living standards.

Figure 10
Investment in Plant and Equipment as a Percent of GDP, 1959 to 2006

Ironically, over the last several years, adjustment assistance programs targeted to small groups of workers and communities have been expanding while general programs designed to those facing severe economic dislocation have become more out-of-date and inadequate. Any national strategy should be designed to provide adequate assistance to all workers, firms and communities facing economic dislocation, regardless of cause.

The existing "one size fits all" worker assistance programs need to be reformed in order to make them more flexible and tailored to the needs of individual workers and local economic conditions. One way to achieve this goal would be to allow workers to formulate their own assistance program from a menu of various forms of assistance, including income maintenance payments, training, employment services, wage insurance, health insurance assistance, as well as job search and relocation assistance.

Most of the current resources devoted to worker assistance are devoted to reducing the costs associated with job loss. The limited wage insurance program under TAA is an effort to shift assistance more toward re-employment. Wage insurance, re-employment bonuses and other wage subsidy schemes, deserve further study and experimentation.

Re-employment services, including job banks, resume-writing and interview workshops, have proven to be extremely cost effective. These efforts should be expanded and made available to workers prior to their lay off. Training may be necessary for workers with little prospect of returning to their original occupation. Programs aimed at encouraging on-the-job training (OJT) should be promoted, since by definition, this form of training is most closely related to re-employment. Dislocated workers should be able to take advantage of the myriad of education-related financial assistance programs available to college-age students.

Providing technical assistance to firms facing intensified domestic and international competition may prevent, or at least minimize, economic dislocations. MEP and the TAA for Firms programs are effective, but have limited reach. These kinds of programs should be expanded and made available to all firms, regardless of location, industry or cause of economic dislocation. These programs should also be integrated into worker and community adjustment programs.

Designing a community adjustment program should begin by borrowing from DOD's base closing program. This program currently assists communities develop and implement a strategic plan for responding to severe economic dislocation, as well as helps communities identify and apply for appropriate federal and State grants and loans.

Communities are rarely "prepared" for significant economic dislocations. For example, most communities do not have the capacity and expertise to assess the needs of workers and assist them in designing their own adjustment plans. Since it is inefficient for each community to develop and maintain this kind of resource, the Fed-

eral Government might establish economic dislocation "swat teams" to provide logistical assistance to communities in a timely fashion. These teams would be assigned to communities in need, moving on once they complete their tasks.

Communities need to have the necessary and adequate infrastructure in order to provide effective training. Since communities may not experience large-scale layoffs often, they may not have resources necessary to meet workers' training needs. For example, training facilities, like community colleges, may not have sufficient room and equipment to accommodate large increases in enrollment. Addressing these considerations should be part of any comprehensive adjustment program.

In order to insure that a community's adjustment efforts are coherent and that all the pieces are fully coordinated, it might convene a group of Federal, State and local governments officials, as well as private sector representatives. The group might include local representatives from unions, community colleges, religious and social service organizations and other non-profit groups, as well as regional coordinators of federal assistance programs, like the Economic Development Administration and the Employment and Training Administration. This group can potentially play an instrumental role in the development and implementation of the community's strategic plan for responding to the economic dislocation it is experiencing.

In some instances, firms may provide their own assistance to laid off workers and local communities. Firms should be encouraged to voluntarily provide this type of assistance, since this is difficult to mandate it. The local board described above might help coordinate and leverage the various forms of public and private assistance.

Conclusion

Pressures facing American workers, firms and communities resulting from increased domestic and international competition are not likely to dissipate any time soon. On the contrary, they are likely to continue intensifying. Existing programs designed to assist workers, firms and communities respond to economic dislocation are ad hoc, out-of-date and inadequate. These piecemeal efforts tend to be "too little too late," placing an additional burden on workers, firms and communities.

The lack of a national strategy designed to respond to economic dislocation is contributing to political backlash against further trade liberalization and the introduction of new technologies. The growing resistance to economic change could jeopardize future increases in economic growth and risk long-term improvements in U.S. living standards.

Economic flexibility brings costs and benefits. Movement out of activities that require low skills and pay low wages and into activities that require high skills and pay high wages can improve overall productivity providing benefits to all Americans. On the other hand, this movement can place a significant burden on workers, firms and communities. Easing this adjustment burden through public and private efforts may reduce opposition to economic change.

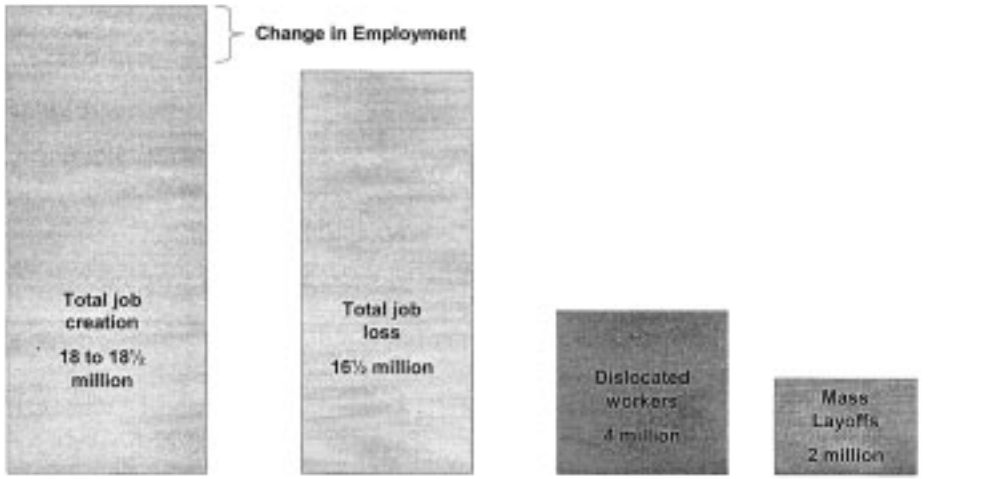
Establishing a comprehensive and integrated National Economic Adjustment Rapid Response, primarily based on updating and expanding existing programs, may be a first step toward responding to the economic dislocations being experienced through the United States.

National Economic Adjustment Rapid Response

Howard Rosen
Subcommittee on Investigation and Oversight
House Science and Technology Committee
June 24, 2008

Peterson Institute
for International Economics

Employment Turnover



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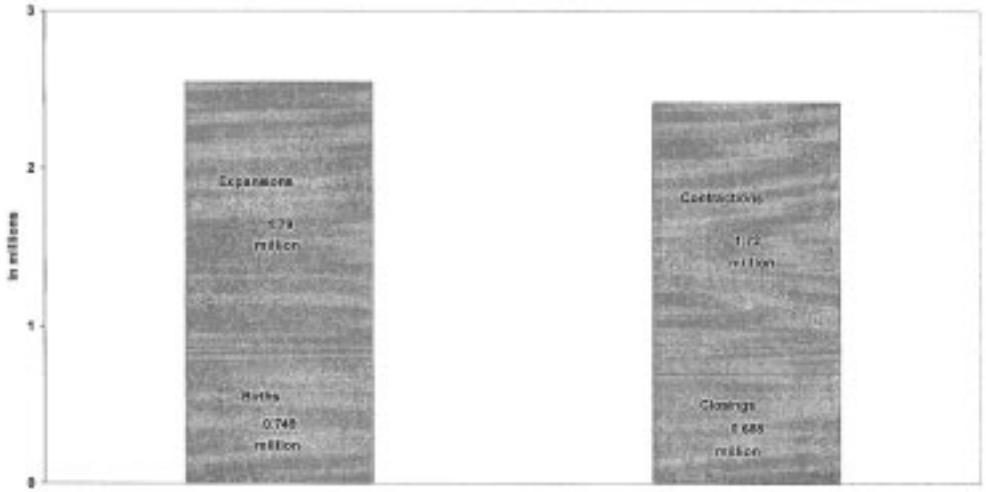
Business Dynamics



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The Adjustment Burden

Kletzer, Lori, Job Loss from Imports: Measuring the Costs, Washington, D.C.: Institute for International Economics, 2001

Prepared by Howard Rosen

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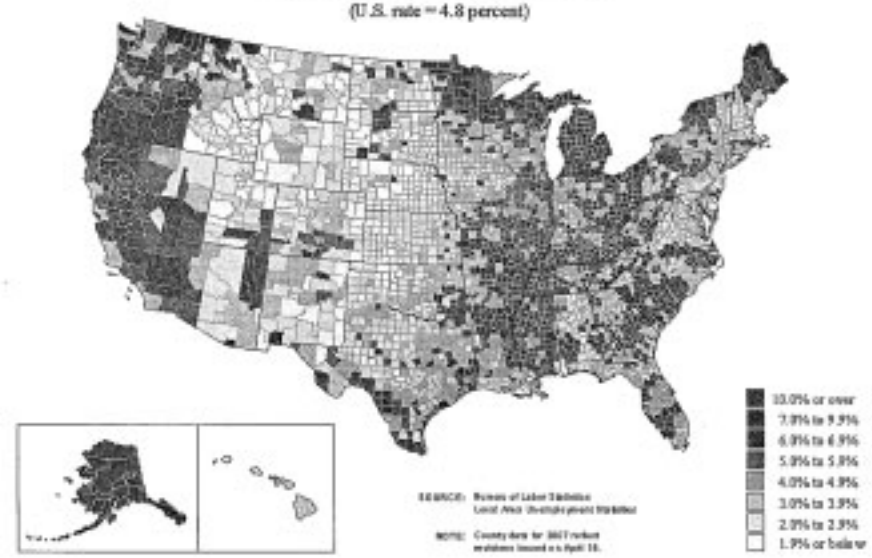
Unemployment rates by county,
May 2007 - April 2008 averages

(U.S. rate = 4.8 percent)



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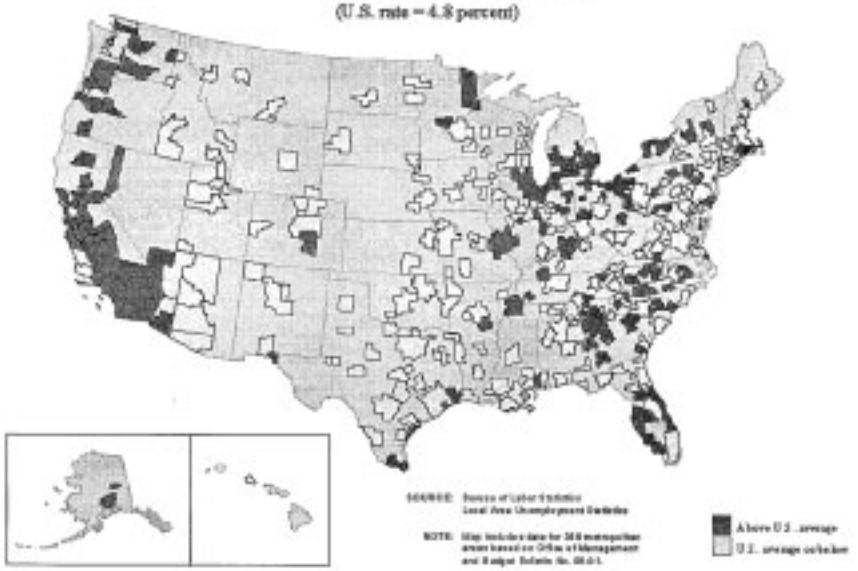
Unemployment rates by metropolitan area, not seasonally adjusted, April 2008

(U.S. rate = 4.8 percent)



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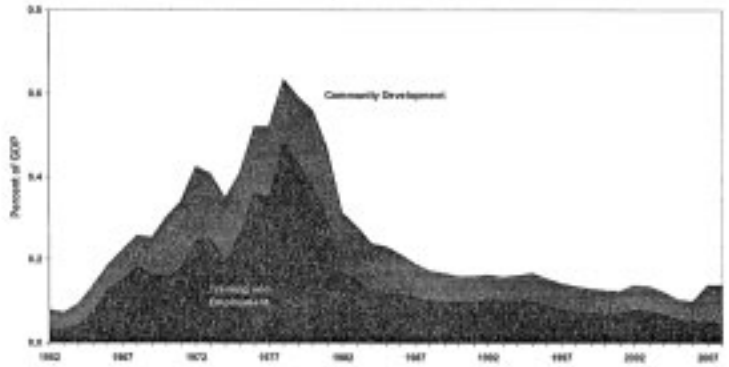
Federal Spending on Training and Employment and Community Development



Prepared by Howard Rosen

Peterson Institute for International Economics

Policy Brief

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Strengthening Trade Adjustment Assistance

Howard F. Rosen

Howard F. Rosen is a resident visiting fellow at the Peterson Institute for International Economics, where he is developing detailed proposals for reforming US labor-market adjustment programs. He is also executive director of the Trade Adjustment Assistance Coalition, which he established to advocate on behalf of workers and communities experiencing dislocations due to changes in international trade and investment. In 2002, he drafted provisions in the Trade Act of 2002 that significantly reformed and expanded the US Trade Adjustment Assistance program. Between 1997 and 2001, he was minority staff director of the Congressional Joint Economic Committee. Before joining the committee, he served as executive director of the Competitiveness Policy Council, a federal advisory commission with representatives from business, labor, government, and the public. He was a research associate and later assistant director at the Institute and an economist in the research department of the Bank of Israel in Jerusalem and in the Bureau of International Labor Affairs in the US Department of Labor.

In 1962, when the United States was running a trade surplus, imports were barely noticeable, and manufacturing employment was increasing, Congress made a commitment to assist American workers, firms, and communities hurt by international trade, by establishing the Trade Adjustment Assistance (TAA) program. This commitment was based on an appreciation that despite their large benefits, widely distributed throughout the economy, international trade and investment could also be associated with severe economic dislocations. President John F. Kennedy best enunciated this commitment when he wrote,

> Those injured by trade competition should not be required to bear the full brunt of the impact. Rather, the burden of economic adjustment should be borne in part by the federal government.... [T]here is an obligation to render assistance to those who suffer as a result of national trade policy.[1]

1. Special Message to Congress on Foreign Trade Policy, January 25, 1962. See Kennedy (1963).

More than 40 years later, with a trade deficit above 5 percent of GDP, with imports as a percent of GDP five times what they were in 1962, and with manufacturing employment falling, this commitment is more important than ever before.

The US economy is currently facing significant pressures from intensified domestic and international competition. There is no "magic bullet" to deal with the pressures from globalization. Most workers realizing alone will not be sufficient to address the large adjustment burden placed on workers and their families. A comprehensive set of integrated efforts is necessary to help the economy adjust to the enormous pressures from globalization. These efforts should not be handouts, but rather targeted, yet flexible assistance aimed at raising productivity and enhancing US competitiveness.

The TAA for Workers, TAA for Firms, and TAA for Farmers and Fishermen programs are part of this strategy. Although the impact of globalization on the US economy calls for strengthening these programs, sound economic policies are the most important prerequisite for responding to the pressures from globalization. In that regard, TAA is a complement to trade policy, not a substitute for it.

WHY TARGETED ASSISTANCE FOR THOSE AFFECTED BY GLOBALIZATION?

Assisting workers move from declining, inefficient industries to growing, highly efficient industries, although painful to workers and their families, can contribute to increasing national productivity and raising living standards. Efforts aimed at encouraging this adjustment are central to any effort at enhancing US competitiveness.

Empirical studies suggest that the benefits of international trade to the US economy are large and widely distributed. One such study finds that international trade contributes approximately $1 trillion a year to the US economy. These benefits are five times the estimated costs, primarily from job and earnings losses, associated with trade (Bradford, Grieco, and Hufbauer 2005).

Although the costs associated with opening the economy to increased international competition are significant to those incurring them, relative to the benefits and the size of the economy they tend to be smaller and more highly concentrated. TAA is

Table 1 Distribution of certified petitions by reason, 2002–07

Grouping	2002	2003	2004	2005	2006	2007
Number of all petitions submitted	2,786	3,555	3,215	2,594	2,488	1,586
Number of workers covered by all petitions submitted	336,855	306,128	218,183	183,712	168,871	85,905
Percent of petitions certified	59	53	56	60	58	63
Percent of certified petitions due to increased imports	n.a.	47	55	53	53	46
Percent of certified petitions due to secondary workers	n.a.	8	9	6	8	9
Percent of certified petitions due to shifts in production	n.a.	38	36	39	39	44

n.a. = not available
Source: US Department of Labor.

ease means of sharing some of the benefits of trade with those workers and communities paying a heavy price for that policy.

The high concentration of the adverse effects of trade and investment on workers, firms, farmers and fishermen, and communities introduces political concerns. Strengthening the commitment to address these distributional consequences could reduce opposition to adopting policies aimed at further liberalization of trade and investment. This rationale has taken on increased importance in recent years, as opposition to trade liberalization has grown.

TAA FOR WORKERS

The TAA for Workers program is by far the largest of the three existing programs. In order to receive assistance, workers must show that they lost their jobs due to any one of the following three eligibility criteria:

- an increase in imports;
- laid off from either an upstream or downstream producer; or
- a shift in production to another country.[2]

Each of these criteria must have "contributed importantly" to a firm's decline in production and sales. Table 1 presents the distribution of certified petitions by reason. In contrast to estimates made during the congressional debate over the 2002 reforms, the number of certified petitions related to shifts in production is much larger than the number of certified petitions for secondary workers.

Workers covered by certified petitions are currently eligible for the following assistance:

- 78 weeks of income maintenance payments, in addition to an initial 26 weeks of Unemployment Insurance (UI), if enrolled in training;
- all training expenses;
- a Health Coverage Tax Credit (HCTC), which provides a 65 percent advanceable, refundable tax credit to offset the cost of maintaining health insurance for up to two years;
- the Alternative Trade Adjustment Assistance (ATAA) program, commonly known as wage insurance, under which workers over 50 years old and earning less than $50,000 a year may be eligible to receive half the difference between their old and new wages, subject to a cap of $10,000, for up to two years;
- 50 percent of the costs associated with job search, up to a limit of $1,250; and
- 90 percent of the costs associated with job relocation, up to a limit of $1,500.

The TAA for Workers program has had a rocky history, including liberalization of eligibility criteria in 1974, cutbacks in assistance in 1981, and the establishment of a special program just for workers affected by trade with Canada and Mexico—i.e., the NAFTA-TAA for Workers program.[3] In 2002 Congress enacted the most expansive set of reforms in the

2. Current law limits this eligibility to shift in production to countries with which the United States has a preferential trade agreement or from which there is a prospect of an increase in imports.

3. See Rosen (2006) for a more detailed discussion of the history of the TAA for Workers program.

TAA for Workers program since it was established. The reforms, first introduced by Senators Max Baucus and Jeff Bingaman, included:

- The TAA for Workers program and the NAFTA-TAA for Workers program were merged. The eligibility criteria and the assistance package under both programs were harmonized and outlined in one program.
- Eligibility criteria were expanded to include workers who lost their jobs from companies producing inputs for goods that face significant import competition, and workers who lost their jobs due to shifts in production to countries with which the United States has a preferential trade agreement or "where there has been or is likely to be an increase in imports. ..."[4]
- The HCTC was established.
- ATAA was established.
- The training appropriation cap was increased to $220 million.
- Income support payments were extended by 26 weeks to enable workers to be enrolled in training and receive income maintenance for up to two years.
- Workers undertaking remedial education can postpone their entry into the TAA for Workers program for up to six months.
- The amounts provided for job search assistance and relocation assistance were increased to keep up with inflation.

Table 2 provides a comparison of program participation data before and after the 2002 reforms. The number of petitions filed does not seem to follow a pattern, despite a consistent increase in imports and outward investment over this period. On the other hand, the share of eligible workers participating in the program has significantly increased. This increase may be a "mixed blessing," as it might reflect the increasing difficulties workers face in finding new jobs.

Trade Adjustment Assistance is a complement to trade policy, not a substitute for it.

ATAA and HCTC are two examples of how assistance under the TAA for Workers program has shifted from traditional income transfers to more targeted, cost-effective assistance. Despite the benefits associated with these new forms of assistance, however, enrollment in ATAA and the HCTC is disappointingly low. A 2005 US Government Accountability Office (GAO) study of five large plant closings found that less than half of those TAA-eligible workers who visited one-stop career centers were even informed of the HCTC. A little over half of eligible workers were aware of the ATAA program.

Table 2 Comparison of participation in TAA for Workers program before and after 2002 reforms, annual average, 1997 to 2005

Grouping	1997–2001	2003–05
Number of petitions filed	n.a.	2,055
Percent certified	87[a]	64
Take-up rate (percent)	19[b]	45
Workers receiving income support	34,800	62,446
Workers in training	31,200	46,103
Workers in ATAA	n.a.	3,864[c]
Workers receiving HCTC	n.a.	22,000

ATAA = Alternative Trade Adjustment Assistance
HCTC = Health Care Tax Credit

a. Figure is for 1999–98.
b. Figure is for 1998–2000.
c. Total is for 2003–05.
Source: US Department of Labor.

Wage Insurance (ATAA)

Many workers who lose their jobs due to import competition and shifts in production pay a heavy price in terms of short- and long-term earnings losses. According to work by Lori Kletzer based on the Displaced Worker Survey, only two-thirds of dislocated workers from high import-competing industries find a new job within one to three years after layoff (Kletzer 2001). Of those workers reemployed, more than half experience no earnings loss or an improvement in earnings. Wage insurance is designed to assist the remaining 48 percent of dislocated workers (see table 3).

Wage insurance is not a substitute for the traditional UI program. The two programs serve two distinct populations: UI serves those workers seeking employment, and wage insurance assists those workers who have found new jobs.

Current labor-market conditions suggest that there is a high probability that workers will face the prospect of accepting a job that pays less than their previous job. Workers enrolled in ATAA unanimously report that financial pressures dictate that they return to work as soon as possible. ATAA helps cushion the potential losses workers face in taking a new job.

For example, the average monthly wage before layoff for workers displaced from high import-competing manufacturing

4. Public Law 107-210, Section 113(a).

Table 1 Reemployment and earnings experience of dislocated workers

Category	Manufacturing	Nonmanufacturing	High-import competing
Average prelayoff weekly wage (dollars)	386.88	368.85	402.87
Share reemployed (percent)	65	69	64
Average change in earnings (percent)	−12.1	−4	−1.3
Share with no earnings loss (percent)	35	41	36
Share with <16 percent earnings loss (percent)	38	29	38
Share with >30 percent earnings loss (percent)	25	21	25
Share unemployed > 26 weeks (percent)	22	15	24

Sources: Author's calculations based on data for 1979 to 2003 from Displaced Worker Survey, Bureau of Labor Statistics (2005).

industries was $402.87 between 1979 and 2001. Those workers who found new jobs faced, on average, a 12 percent loss in earnings. Under the current wage insurance program, these workers would be eligible to receive an additional $5,532 for the first two years after reemployment, an 8 percent increase in their new wage.

Despite its benefits, wage insurance is not a perfect solution to addressing the costs associated with unemployment. The 26-week deadline for eligibility and the inability to enroll in training while receiving wage insurance are two examples of shortcomings in the current program. One option to address these problems would be to remove the 26-week requirement and allow workers to enroll in training while receiving wage insurance. A more ambitious proposal would be to enable workers, with the approval of their one-stop career counselor, to design a mix of income support, training, and wage insurance over a two-year period. The benefits of the program suggest that eligibility should also be expanded to those younger than 50 years old.

Health Coverage Tax Credit

The Henry J. Kaiser Family Foundation reports that the average cost for health insurance for a family of four in 2006 was $11,500.[5] This equals 85 percent of the average amount of annual income support provided under the TAA for Workers program. For many workers, maintaining health insurance can be one of the largest, if not the largest, expense during unemployment. As a result many workers forgo health insurance. Unemployed workers and their families comprise a large share of the uninsured.[6]

The HCTC provides workers a 65 percent refundable, refundable tax credit to offset the cost of maintaining health insurance for up to two years. The Internal Revenue Service (IRS) reports that since 2003, approximately 22,000 workers have used the credit, or about 500 to 600 new enrollees per month.[7] This constitutes only a small percentage of eligible workers. According to a study of workers from five plant closings, the GAO found that between 3 and 12 percent of eligible workers used the HCTC (GAO 2006). Between 39 and 60 percent of workers claimed they were not aware of the credit.

Wage insurance is not a substitute for the traditional UI program.

Of those workers who did use the credit, the GAO found that between 58 to 82 percent of workers were covered by other health insurance—i.e., from a spouse. Forty-seven to 79 percent of respondents claimed that they could not afford to maintain their health insurance, despite the credit. Fifteen to 35 percent of workers found the credit too complicated.

In contrast to the Department of Labor (DOL), the IRS has implemented an outreach effort to inform each worker directly about the HCTC. Despite this effort, additional efforts appear necessary to ensure that all workers are aware of the

5. See the Henry J. Kaiser Family Foundation, *Employer Health Benefits 2006 Annual Survey*, September 26, 2006.

6. US Census Bureau (2005). More than one-quarter of those workers without health insurance, aged 18 to 64, were not working.

7. The number of people covered by the HCTC rises to 57,000 when family members of TAA-eligible workers are included.

credit. Congress should also consider raising the amount of the credit in order to make maintaining health insurance more affordable to unemployed workers and their families. Technical problems relating to waiting periods and health insurance options for workers not covered by their previous employer's health insurance need to also be addressed.

The Next Round of Reforms

For the most part, the 2002 reforms "fought the last battle" and did not fully address more recent economic developments, such as international outsourcing of services. In addition, several technical problems were discovered while implementing the 2002 reforms, which need to be addressed. Following are the major issues that still need to be addressed:[8]

Service Workers. The service sector is increasingly under pressure from outward shifts in investment and international outsourcing.[9] Based on its current interpretation of the statute, DOL denies assistance to workers who lose their jobs from the service sector. DOL argues that workers in the service sector do not produce items that are "similar or like an imported good (emphasis added)." Although the law does not specifically restrict TAA eligibility to workers employed in manufacturing industries per se, over the years DOL's interpretation of the law has de facto resulted in such a restriction. A recent GAO study finds that denying assistance to service sector workers currently accounts for almost half of petition denials.[10]

In response to several recent appeals brought before the Court of International Trade, DOL recently announced that that it would consider petitions on behalf of software workers.

The statute governing the TAA for Workers program needs to be updated to explicitly cover workers who lose their jobs from service industries. A simple change in legislative language alone will not be sufficient to achieve this goal, since data do not currently exist to measure the importation of services. The administration and Congress may need to consider alternative methodologies for determining trade impact in order to adequately cover workers who lose their jobs in service industries.

Industry Certification. Petitions for TAA eligibility are currently filed according to firm-related layoffs, meaning that multiple petitions must be submitted by different groups of workers employed in the same firm as well as in the same industry. In an effort to streamline the petition process and remove arbitrary discrimination between workers from the same firm and industry, industry wide certification should be added to the existing firm-related layoff certification.

For example, if the apparel industry was found to experience a decline in employment related to an increase in imports or outward shift in investment, then any worker subsequently laid off from the industry over the next two years or so would be automatically eligible for TAA without needing to go through the bureaucratic petition process.

...denying assistance to service sector workers currently accounts for almost half of petition denials.

In discussing this idea, Senator Baucus recently commented that all workers laid off from a specific industry should be covered by a single certification, the same way that all producers are covered by a single granting of import relief by the International Trade Commission.[11]

Given data limitations concerning the service sector, industry certifications would facilitate eligibility determinations for workers displaced from service industries.

Training Appropriations. Allocating training funds to states to meet the needs of workers has been a challenge to DOL under successive administrations. GAO recently reported that, on average, states spent or obligated 62 percent of their training allocations in 2006, with a large range among the states (GAO 2007a). The GAO found that 15 states spent less than 1 percent of their training allocation while 9 states spent more than 95 percent of their training funds in 2006 (GAO 2007b).

Currently, DOL allocates 75 percent of TAA training funds according to a formula based on states' spending over the previous two and a half years. Thus states that experience large layoffs in a subsequent year may receive an inadequate amount of training funds to meet the needs of all TAA-eligible workers. Conversely, states that experience large layoffs in previous years may receive more training funds than needed in a subsequent year. GAO also reported that DOL allocates a significant amount of funds at the end of the fiscal year, making it difficult for states to utilize those funds. Since existing legislation does not address this issue, DOL has complete discretion

8. See Kletzer and Rosen (2005) for additional recommendations.

9. Alan Blinder (2006) recently estimated that as many as 42 million to 56 million jobs, or 30 to 40 percent of total US employment, could be under pressure from possible offshoring. This estimate includes 16 million manufacturing workers and 26 to 42 nonmanufacturing workers, primarily workers employed in the service sector.

10. GAO (2007a). Many more workers may be discouraged from submitting petitions.

11. TAA Coalition meeting, April 13, 2007.

in setting the method by which training funds are allocated to the states.

The allocation of training funds desperately needs improvement. Currently, DOL makes two disbursements—one at the beginning of the year and another at the end of the year. One recommendation would be to increase the number of disbursements, spread out more evenly throughout the year, based on shorter look-back periods—i.e., six months.

Currently the law sets a global cap of $220 million for training expenditures under the TAA for Workers program. The cap is not adjusted for inflation, changes in the economy or major plant closings. As a minimum, the training cap needs to be raised on a regular basis. Ways to better link the training appropriation to the needs of TAA-eligible workers should also be explored.

Health Coverage Tax Credit (HCTC). GAO's survey of workers involved in five plant closings found that almost 70 percent of those workers without alternate health insurance reported that they could not afford to maintain their previous health insurance, despite the HCTC (GAO 2000). In a subsequent report, GAO estimated that even with the 65 percent tax credit, the cost of maintaining health insurance in four sample states was equal to approximately 25 percent of a worker's average monthly UI payment. Although the HCTC appears to have been an important addition to the package of assistance provided to workers, the amount of the credit needs to be increased in order to enable more workers to use it.

... other industrialized countries are devoting many more resources to labor-market adjustment programs than is the United States.

Currently, workers must receive income maintenance (or participate in ATAA), which means that they must be enrolled in training, in order to be eligible to receive the HCTC. This restriction severely limits the number of displaced workers who can receive the credit. GAO found that this requirement has forced workers to both enroll in training and receive income maintenance payments or to apply for a training waiver.[13] Some argue that requiring a worker to undertake training promotes "real adjustment," while others contend that it results in workers getting expensive assistance that they may not need or want. One proposal would be to provide the HCTC to all TAA-certified workers for up to two years or until the worker finds a new job, regardless of enrollment in training.

Other technical issues concerning the HCTC, such as the waiting period before enrollment, require immediate attention.

Wage Insurance (ATAA). The current program is restricted to workers over the age of 50. Although there is some evidence that older workers may have a harder time finding a new job, ATAA can potentially benefit all workers. It is a cost-effective means of cushioning the costs associated with taking a new job. The age requirement for ATAA should be lowered or even eliminated in order to make more workers eligible.

Self-Employed. Under the current program, workers are discouraged from pursuing self-employment. One option would be to continue providing income support, training, and possibly wage insurance to workers starting their own businesses.

Outreach. GAO has consistently found that many workers are unaware of the assistance provided by the TAA for which they are eligible (GAO 2000). This lack of awareness may help explain why program take-up rates are so low. DOL's outreach efforts seem inadequate. More resources need to be devoted to informing workers about TAA and other forms of assistance for dislocated workers.

Data Reporting. DOL, under successive administrations, has made it extremely difficult to obtain TAA program data, thereby making it hard to evaluate how well the program is working and which aspects of the program need to be improved, eliminated, or expanded. Public access to TAA program data is therefore critical to monitoring and evaluating the program.[14]

The TAA for Workers program is currently financed through general revenues, without any dedicated revenue offset.[15] In recent years the program's appropriation has not been a problem, primarily because the income maintenance portion is an entitlement and the training cap is set by law. On the other hand, total anticipated costs have been an issue when considering further program reforms and expansion. A dedicated funding stream might relieve some of these concerns, thereby enabling the program to reach its full potential.

One proposal to finance a further expansion of the program would be to dedicate some portion of customs duties.

13. GAO (2000). Some states have issued training waivers in order for more workers to receive the HCTC.

15. After years of complaints, DOL has recently begun making some data available on its website.

14. Section 245 of the Trade Act of 1974 called on the Department of the Treasury to establish a trust fund, financed by all customs duties, from which to finance TAA, but this trust fund has never been established.

Customs duties equaled approximately $28 billion in FY2007, and they are expected to rise to $35 billion over the next five years.[9] Since funds collected from customs duties are considered general revenue, diverting them to finance these proposals would contribute to the federal budget deficit. A more limited proposal would be to dedicate only the increase in customs duties over the next few years to offset the costs associated with expanding adjustment programs. This would also exacerbate the fiscal deficit and might not be sufficient to cover the total costs of the more ambitious proposals outlined above. Nonetheless, it might be a good way to jump-start the reform process.[10]

TAA FOR FIRMS

Congress established the TAA for Firms program in 1962 to help American firms respond to the pressures from increased import competition and *avoid* possible cutbacks and layoffs. Initially the program provided technical assistance, loans, and loan guarantees. Congress eliminated the loans and loan guarantees in 1986. Technical assistance is currently provided to firms by 11 Trade Adjustment Assistance Centers (TAAC) located around the country. Eligibility criteria mirror, although are not exactly the same as, those for the TAA for Workers program.

The TAA for Firms program has historically been quite small. Between 2001 and 2006, the program assisted approximately 180 firms a year covering some 16,000 workers. Average spending over the last nine years has been $11 million per year.

A recent evaluation by the Urban Institute found that firms that participated in the TAA for Firms program had a higher survival rate (84 percent) than eligible firms that did not participate in the program (70 percent), five years after certification. According to Gary Kuhar, director of the Northwest Trade Adjustment Assistance Center (NWTAAC), since 1986, there has been an 80 percent survival rate for firms assisted in his region. According to their internal cost-benefit analysis, this survival rate translates into a return of $254 for every federal dollar managed by the NWTAAC.

Congress should explore ways to expand the program, while ensuring its effectiveness. Existing eligibility criteria should be liberalized to more current economic conditions. In addition, program funding and the capacity of the TAACs will need to be expanded if TAA eligibility criteria were expanded to include the service sector. Congress might also explore ways to integrate the TAA for Workers and TAA for Firms programs by automatically making all workers employed by firms participating in the TAA for Firms program eligible for the TAA for Workers program, and vice versa.

TAA FOR FARMERS AND FISHERMEN

Congress established the TAA for Farmers and Fishermen program as part of the 2002 reforms, based on legislation introduced by Senators Kent Conrad and Charles Grassley in the 106th Congress. Farmers and fishermen whose crops face a precipitous drop in their international price can receive subsidial cash payments if they participate in technical assistance programs. Financial assistance is currently calculated as half of the difference between the most recent year's crop price and 80 percent of that price over the previous five years, subject to a limit of $30,000 per year.

Between 2004 and 2006 nine crops were eligible for assistance: avocados, catfish, Concord grapes, fresh pomeron, lychees, olives, salmon, shrimp, and wild blueberries. The program's experience over this period suggests that cash payments have been very small, making the program somewhat unattractive to farmers and fishermen. On the other hand, there is evidence that the technical assistance provided has been useful to helping farmers and fishermen diversify their crops and/or improve the yield and value of their existing crops. Enrollment in technical assistance seminars has been encouraging, although it is too early to measure their effectiveness.

Despite public support for assistance and increased worker training, expanding labor-market adjustment programs remains a low priority in the United States.

An evaluation by the Western Center for Risk Management Education found that 40 percent of participants undertook changes to adjust to import competition as a result of the program.

The program is handicapped by two related problems. First, eligibility criteria are too restrictive, thereby denying assistance to farmers and fishermen in need of assistance. Second, due to the formula used, the amount of income assistance provided is very small, thereby making the program, and any subsequent adjustment to import competition, financially unattractive.

Annual spending on the TAA for Farmers and Fishermen program has been uneven, averaging $10 million annually over the last five years. Spending reached a peak of $21.5 million in

9. Multilateral agreements are likely to reduce tariff rates over the coming years. On the other hand, increases in imports could increase the amount of tariff revenue collected.

10. It should be noted that there is long-standing opposition among economists to dedicated funding schemes.

Table 4 Spending on active labor-market programs

Country	As a percent of GDP	Ratio of spending as a percent of GDP to the unemployment rate	As a percent of total spending on all labor-market programs
France	1.52	0.14	44.4
Germany	1.21	0.16	38.6
Canada	0.41	0.06	58.4
United Kingdom	0.37	0.07	48.0
Korea	0.31	0.08	68.9
Japan	0.28	0.06	34.2
United States	0.15	0.05	32.9

Source: Organization for Economic Cooperation and Development, Employment Outlook 2000, data for 1998–2005.

FY2005, before falling to $4.7 million in FY2006 and less than $1 million in FY2007.[17]

The European Union devotes 10 percent of the amount it spends on the Common Agricultural Policy (CAP) to provide adjustment to farming and fishing.[18] FY2006 spending on the TAA for Farmers and Fishermen program was less than one-tenth of 1 percent of total US farm income support.[19] Expanding the TAA for Farmers and Fishermen program, in a responsible and effective way, could contribute to reducing farm income support, which places pressure on the federal budget and continues to stand in the way of multilateral trade negotiations.

TAA FOR COMMUNITIES

The impact of globalization on the US economy is not limited to workers, firms, farmers, and fishermen. Broader communities in which these groups are located also experience the consequences of massive layoffs and earnings losses. Workers who lose their jobs cannot afford to purchase nonessential goods or eat in restaurants, thereby causing the effects of a plant closing to ripple across a community. Plant closings also erode a community's tax base, making it more difficult for the community to provide important services and attract new investment.

In addressing any job loss, the primary objective should be to get people back to work, as soon as possible, with the least amount of financial loss. The TAA for Workers program only takes a small step toward helping workers meet that objective. The 2002 reforms began to transform the TAA for Workers program from one focusing almost exclusively on income support and training to one that aims toward reemployment. The most important ingredient of any reemployment program is the availability of jobs, preferably higher-paying jobs.

Several members of Congress have recently called for a TAA for Communities program.[20] This proposal is based in part on a growing awareness that the effectiveness of any training program is limited by the availability of jobs that utilize the skills acquired in that training. Under those circumstances, job creation requires shifting the composition of existing investment and attracting new investment.

The Economic Adjustment program at the Department of Defense (DOD) has been successful in helping communities in the aftermath of a military base closing. Under the program, DOD provides intensive technical assistance and funds to help communities to prepare and implement strategic plans for economic development.[21]

One proposal would be to temporarily assign a technical advisor to those trade-impacted communities willing to undertake certain activities. The advisor could help the community leaders design a strategic plan for economic development and apply for assistance under various existing public and private programs.

17. Data are from the Foreign Agriculture Service, US Department of Agriculture.

18. Annual spending on the CAP is estimated to be $45 billion.

19. Total US farm income support amounted to $46 billion in FY2006.

20. Senator Hagel has introduced this proposal in 2001.

21. See Rosen (2001) for a discussion of a limited experiment, borrowing from DOD's base closing program, which was tried in New Mexico in 1998.

INTERNATIONAL COMPARISONS

As mentioned above, programs aimed at enhancing economic adjustment to the current realities associated with globalization should be part of any nation's competitiveness strategy.

Currently, other industrialized countries are devoting many more resources to labor-market adjustment programs than is the United States (see table 4). Relative to six other major industrialized countries, the United States spends the least on active labor-market adjustment programs, even after taking into account each country's unemployment rate. France and Germany each devote about five times more to their active labor-market programs than does the United States.

On the other hand, the Danish "flexicurity" system, which is currently getting a lot of attention, is not a magic bullet. In addition to differences in hiring and firing policies, the Organisation for Economic Cooperation and Development estimates that Denmark spends eight times more public funds, as a share of GDP, to labor-market programs than the United States.[22] The Danes spend 10 times more public funds, as a share of GDP, to training and five times more, as a share of GDP, to income support than the United States.

CONCLUSION

Public opinion surveys find that Americans are willing to support trade liberalization *if* the government assists those workers, firms, and communities adversely affected by trade and offshore outsourcing. Despite significant changes in the US economy over the last 45 years, including an increase in import penetration and a decline in manufacturing employment, efforts to assist workers adversely affected by increases in imports and shifts in production have remained modest at best. Efforts to reform and expand the program in 2002 was extremely useful in breathing new life into that commitment. But implementation of those reforms has been uneven at best. More effort must be undertaken to ensure that all workers, firms, farmers, and fishermen receive the assistance they need.

Several pieces of legislation have already been introduced, and several others are likely to be introduced, to continue the efforts begun in 2002 to reform and expand TAA. These proposals include extending eligibility criteria to cover workers who lose their jobs from service industries, establishing a process for certifying entire industries, increasing the budget cap on training expenditures, and expanding the HCTC and wage insurance programs. Congress should seriously consider enacting these proposals.

22. Danish labor laws are more protective of workers than US labor laws.

The increased importance of international trade to the US economy and the growing concern over economic dislocations would seem to make assistance to workers, firms, and communities facing these pressures a more pressing issue in 2008 than it was in 1962. Yet despite public support for this kind of assistance and rhetoric on the need to increase worker training, expanding labor-market adjustment programs remains a low priority in the United States. This needs to change if the United States wants to pursue a competitiveness strategy that increases productivity and raises living standards.

REFERENCES

Blinder, Alan. 2006. Offshoring: The Next Industrial Revolution? *Foreign Affairs* (March/April).

Bradford, Scott C., Paul L. E. Grieco, and Gary Clyde Hufbauer. 2005. The Payoff to America from Global Integration. In *The United States and the World Economy: Foreign Economic Policy for the Next Decade*, ed. C. Fred Bergsten and the Institute for International Economics. Washington: Institute for International Economics.

GAO (US Government Accountability Office). 2006. *Trade Adjustment Assistance: Most Workers in Five Layoffs Received Services, but Better Outreach Needed on New Benefits*. GAO-06-43. Washington.

GAO (US Government Accountability Office). 2007a. *Trade Adjustment Assistance: Changes in Funding Allocation and Eligibility Requirements Could Enhance States' Ability to Provide Benefits and Services*. GAO-07-701. Washington.

GAO (US Government Accountability Office). 2007b. *Trade Adjustment Assistance: States Have Fewer Training Funds Available Than Labor Estimates When Both Expenditures and Obligations Are Considered*. Report to the Chairman, Subcommittee on Trade, Committee on Ways and Means, House of Representatives. Washington.

Kennedy, John F. 1963. *Public Papers of the President of the United States, 1963*. Washington: Government Printing Office.

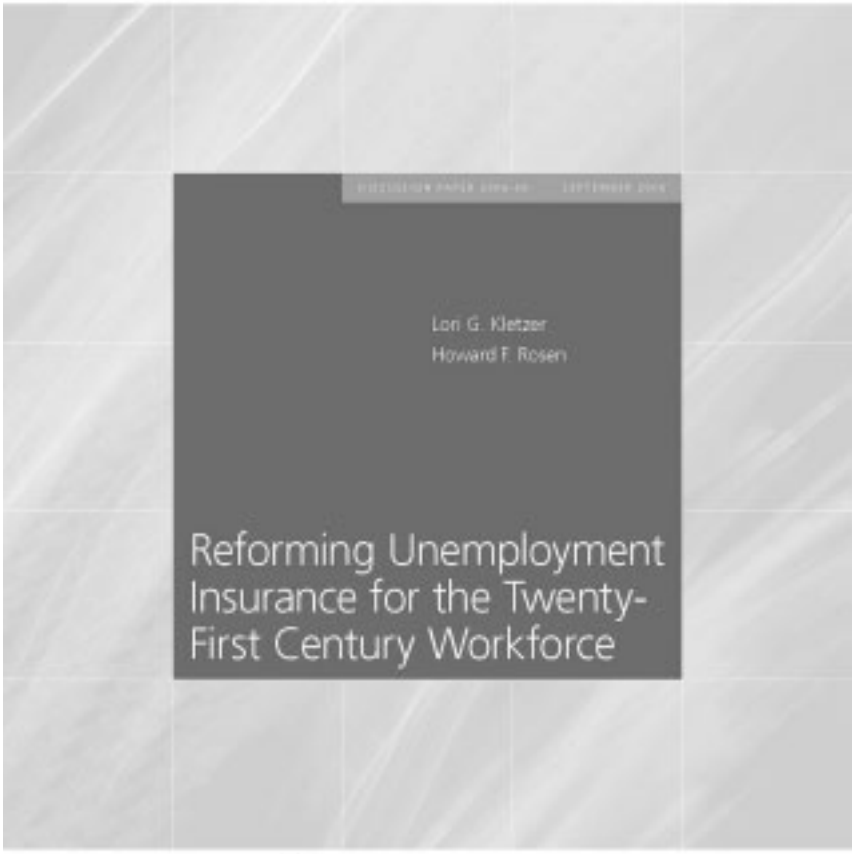
Kletzer, Lori G. 2001. *Job Loss from Imports: Measuring the Cost*. Washington: Institute for International Economics.

Kletzer, Lori G., and Howard F. Rosen. 2005. Easing the Adjustment Burden on US Workers. In *The United States and the World Economy: Foreign Economic Policy for the Next Decade*, ed. C. Fred Bergsten and the Institute for International Economics. Washington: Institute for International Economics.

Rosen, Howard F. 2001. A New Approach to Assist Trade-Affected Workers and Their Communities: The Roswell Experiment. *Journal of Law and Border Studies* 1: 1.

Rivera, Howard F. 2000. Trade Adjustment Assistance: The More We Change the More It Stays the Same. In *C. Fred Bergsten and the World Economy*, ed. Michael Mussa. Washington: Institute for International Economics.

U.S. Census Bureau. 2000. *Income, Poverty and Health Insurance Coverage in the United States—2000*. Washington (August).


THE
HAMILTON
PROJECT
Advancing Opportunity,
Prosperity and Growth
Lori G. Kletzer
Howard F. Rosen
Reforming Unemployment Insurance for the Twenty-First Century Workforce
THE BROOKINGS INSTITUTION

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THE HAMILTON PROJECT

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Reforming Unemployment Insurance for the Twenty-First Century Workforce

Lori G. Kletzer

Howard Rosen

This discussion paper is a proposal from the authors. As emphasized in The Hamilton Project's original strategy paper, the Project is designed in part to provide a forum for leading thinkers across the nation to put forward innovative and potentially important economic policy ideas that share the Project's broad goals of promoting economic growth, broad-based participation in growth, and economic security. Authors are invited to express their own ideas in discussion papers, whether or not the Project's staff or advisory council agree with the specific proposals. This discussion paper is offered in that spirit.

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Abstract

Despite significant changes in U.S. labor market, the basic structure of the nation's unemployment insurance (UI) program has remained unchanged since it was created in 1935. The current system is in need for reform in order to meet the needs of a twenty-first century workforce. Shortfalls in the current program fall into four categories: (1) overly restrictive eligibility criteria have resulted in low recipiency rates; (2) benefit levels are low; (3) the federal tax system used to finance the program is regressive; (4) and the mechanism to automatically extend UI during periods of prolonged economic downturns is broken. As a result of these and other factors, only about one-third of unemployed workers currently receive assistance under the UI program, and that assistance falls short of the original goal of replacing at least half of previous earnings. In addition, the system provides no assistance either to the self-employed or to those who become unemployed at lower wages.

In this paper we propose three broad reforms, each designed to help the UI system better meet the needs of a twenty-first century workforce. First, we propose strengthening the federal role in UI by setting federal standards that would require states to harmonize their eligibility criteria and benefit levels. These new standards would aim to raise average national benefit levels and average national recipiency rates. Expansions in the program would be financed by raising the FUTA taxable wage base over time to $45,000 to adjust for inflation over recent decades. Second, we propose a wage-loss insurance program, as part of the UI program, to provide an earnings supplement for those workers who become reemployed at a wage lower than the wage they earned at their previous job. Finally, we propose allowing self-employed workers, and perhaps others, to contribute up to 0.25 percent of annual income, up to $200 per year, into Personal Unemployment Accounts (PUAs). These contributions would be matched by the federal government and could be withdrawn later to cushion severe income losses or to finance training or job search.

Contents

Introduction

The unemployment insurance (UI) system is the foundation of the U.S. government's response to the hardships associated with economic downturns and reduced job loss. In response to the Great Depression, the Social Security Act of 1935 established the UI and Social Security systems.[1] There have been no major changes to the basic structure of the UI system since then, despite significant changes in U.S. labor market conditions. Currently, just over one-third of unemployed workers actually receive assistance under the program, and that assistance is modest, at best. The 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands each administers and finances its own UI program, resulting in vast differences in benefit levels and tax rates, which do not appear to reflect local labor market conditions. The goals of UI are to provide income support during the period of unemployment (that is, to smooth income and thus to smooth consumption), and to provide insurance against the risk of job loss. The failure to provide extended assistance in an orderly and timely fashion has seriously hindered the program's ability to achieve one of its other objectives: to provide countercyclical stimulus during periods of economic downturns.

While the basics of UI have remained unchanged, the U.S. labor market and workforce have experienced significant changes over the past half century. The agricultural-manufacturing economy of the 1940s and 1950s has been transformed into the service economy of the late twentieth and early twenty-first centuries. The entry of women into the labor force, the decline of traditional employer-based full-time employment, and the rise of contingent and part-time employment are just some of the sweeping changes that have taken place over the past 70 years. In addition, UI has never served the self-employed, who now total more than 10 million workers.[2] Our starting point is that the current UI system is seriously out of date, given the needs of a twenty-first century workforce. Although the basic structure is sound, important aspects of the system are in desperate need of reform. Although we are not the first to call for reform, the recommendations of the congressionally mandated Advisory Council on Unemployment Compensation (1996a, 1996b), chaired by long-time Bureau of Labor Statistics Commissioner Janet Norwood, did not receive the attention they deserved when they were issued in the mid-1990s, and have since all but been forgotten.

This paper is presented in four sections. Section 1 highlights recent changes in the U.S. labor market. Section 2 describes the current structure of UI and identifies its shortcomings. Section 3 presents several bold policy recommendations for reforming the UI system to better suit the needs of the current workforce, and Section 4 presents our conclusions.

1. Widespread economic hardship experienced in the 1930s had a huge impact on the nation's conscience and contributed to a sea change in the view of the role of the government in the United States. People in need began looking to the government, as opposed to families and other social institutions, as the primary provider of assistance. Social Security and UI constitute the most comprehensive social welfare programs in the history of the United States.
2. Based on Current Population Survey data, 10.3 million workers were self-employed in 2005, accounting for 7.3 percent of total employment (Hipple 2006). Self-employment as a share of employment has fallen, however, over the more than 70 years since the establishment of UI. Much of this decline is explained by the declining importance of agriculture in employment. Incorporated self-employment has risen, as has the participation of women in self-employment (Hipple 2004).

I. Changes in the U.S. Labor Market

Kletzer and colleagues (forthcoming) document the sweeping changes in the labor force that have occurred since the late 1930s. A significant rise in population, fueled in large part by the postwar Baby Boom, and the increasing participation of women in the labor force resulted in its tripling in size—from slightly more than 50 million people in 1939 to almost 153 million people in 2004.[1] The most significant change over the past 40 years has been the entry of women into the labor force. Since 1960, the female labor force participation rate has increased by 18 percentage points, while the male labor force participation rate has declined slightly.

The composition of employment has also changed significantly. Agricultural employment, in decline for the better part of a century, stood at 6 percent of total employment in the 1960s and is currently just below 2 percent of total employment. Manufacturing employment, as a share of total employment, has fallen by half, from 34 percent in the 1960s to 17.5 percent currently. Services have dominated employment since the 1960s, with manufacturing employment now accounting for about one in six jobs.

In addition to changes in the demographics and the composition of employment, there have been changes in the nature of unemployment. After rising between the 1960s and the 1980s, the average unemployment rate began falling in the 1990s, reaching a low of 4 percent in 2000 and remaining moderate over the past six years (Table 1).

Despite overall declines in the unemployment rate, the average and median duration of unemployment has increased. These two conflicting trends suggest a change in the source of joblessness—from temporary layoff to permanent displacement.[2] McConnell and Tracy (2005) document that, from the 1960s to mid-1980s, recessions featured surges in temporary layoffs, while for the past two recessions (early 1990s and 2001), cyclical increases in the rate of temporary layoffs were not evident.[3] Overall, new entrants account for a smaller share of the unemployed, and job losers account for a larger share of the unemployed. Compared to the 1970s, those currently unemployed have more labor force experience.

Table 1.
Unemployment Rate and Duration, by Decade

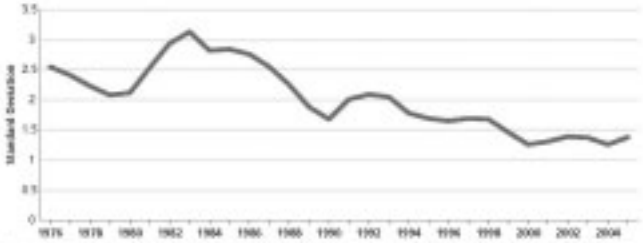
		Unemployment	
Decade	Rate	Average duration	Median duration
1960s	4.8	11.8 weeks	3.7 weeks*
1970s	6.2	11.9 weeks	6.3 weeks
1980s	7.3	15.0 weeks	7.1 weeks
1990s	5.8	15.7 weeks	7.6 weeks
2000s	5.2	16.2 weeks	8.2 weeks

Sources: Authors' calculations based on data from Bureau of Labor Statistics and U.S. Department of Labor (from LABSTAT/BLS, LABSTAT/ETA, and LABSTAT/TS).
*BLS only reports median duration of unemployment data for 1967 to 1969. The average of these three years is 5.3.

For most of the past century, employment and unemployment were highly correlated with the business cycle. This relationship appears to have changed in recent years. First, with the exception of the early 1990s, there has been a decline in the official length of recessions. Second, there has also been a decline in the magnitude of job losses occurring during economic slowdowns. Third, employment declines have continued for at least one year after the end of the last two recessions and employment recovery has taken longer. Taken together, these three developments suggest that something has changed in the underlying structure of the U.S. labor market in recent years.

1. The entry of the Baby Boomers cohort into the labor force now prompts the expected aging and shrinking of the labor force as Boomers reach retirement age.
2. In a temporary layoff, there is an expectation that the employer will recall laid-off workers in the future.
3. See also Groshen and Potter (2003). In addition, McConnell and Tracy (2005) show that improvements in the (imperfect) experience rating of UI play little role in explaining the dwindling share of temporary layoffs in unemployment. Lower manufacturing production volatility has easier explanatory power.

FIGURE 1
Variation in State Unemployment Rates, 1976–2005



Source: Authors' calculations based on data from Bureau of Labor Statistics.

The data presented in Figure 1 suggest that there has been a significant decline in variation across state unemployment rates over the past 30 years. During the late 1970s, states in the Northeast and Midwest—regions with high concentrations of traditional industries such as automobile manufacturing, textiles and apparel, and steel—experienced significantly higher unemployment rates than states in other regions. Beginning in the 1980s, state unemployment rates began converging toward the national average, reflecting a slow decline in overall unemployment and more similarity in state unemployment rates. This convergence suggests that, during the past 20 years, unemployment has been explained more by national factors than by state or regional factors.

To summarize, we have identified the following five major developments in the U.S. labor market:

1. There has been an increase in labor market participation by various demographic groups. The typical worker of 1935 was not the typical worker of 2006.
2. The shift of employment from agriculture to manufacturing has been joined by a shift from manufacturing to services.
3. Despite a moderate aggregate unemployment rate, the duration of unemployment has increased, with a greater incidence of permanent job loss than of temporary layoffs.
4. State unemployment rates are converging, reflecting a reduction in their variation.
5. Changes in employment and unemployment seem to be due more to structural rather than to cyclical factors.

Newer firm-level employment data provide deeper insights into recent developments in the U.S. labor market. Analysis by a number of scholars reveals a high degree of labor market dynamism across all industries.[4] The high degree of employment turnover, evidenced in the firm-level data, confirms and provides deeper insights into the findings reported above; i.e., a moderation in the unemployment rate, an increase in the duration of unemployment, and a reduction of the importance of business cycles in explaining unemployment. All of these labor market conditions are very different from conditions that existed when UI was established.

The original UI program was designed to offset income losses during cyclical periods of temporary involun-

4. During the 1990s, the U.S. Census Bureau and the Bureau of Labor Statistics began publishing information on job creation and destruction based on firm-level data (Davis and colleagues 1996, Klein and colleagues 2000).

tary unemployment. By contrast, current workers face short-term transitional unemployment as they move from job to job, and they face long-term structural unemployment. The existing UI system is inadequate in responding to these labor market conditions. The system also does not assist workers who seek part-time employment, workers who voluntarily leave one job in order to take another, or workers who experience long-term unemployment. New entrants and reentrants into the labor market are not currently eligible for UI, since these two groups of unemployed do not fit well with one of the program's original objectives, i.e., insuring against the risk of involuntary job loss. Covering these workers would raise issues concerning the amount and duration of assistance, since they may not have relevant work experience.

Underlining these macroeconomic changes to the U.S. labor market is a shift from traditional employer-based full-time employment to an increased reliance on contingent and part-time employment. The shift to these nontraditional forms of employment reflects additional shortfalls in the current UI program. A system designed to provide income support during temporary layoffs for workers who were permanently attached to a single employer is not well designed for a labor market with considerable self-employment and contingent, part-time, and low-wage employment.

II. The Current UI Program

Federal law established the UI program in 1935 in order to provide temporary and partial wage replacement to workers involuntary separated from their jobs. It was believed that UI would serve as a countercyclical mechanism to help stabilize the economy during economic slowdowns. In the more contemporary language of the economic analysis of insurance, the primary goal (or benefit) of UI is the ability of the government to smooth income and consumption during unemployment spells.

The UI program was modest at first. Coverage was limited to employers with more than eight employees working at least 20 weeks a year. The program did not originally cover workers employed in agriculture, nonprofits, or the government.[7] Most states set their benefit levels at 50 percent of previous earnings, up to an initial maximum benefit of $15 a week. The duration of payments ranged from 12 to 20 weeks, with most states providing assistance for a maximum of 16 weeks. Approximately 500 million unemployed workers have received more than $680 billion in assistance since the establishment of the program.[8]

As established in 1935, the UI program is a federal-state system. The federal government establishes rules and standards, primarily on minimum coverage and eligibility criteria, and sets a minor tax to finance the overall administration of the program. Individual states set their own benefit amounts, duration of assistance, and means of financing that assistance.

Like Social Security and Medicare, UI, which buffers income losses associated with involuntary job loss, is a social insurance program.[9] Private UI could provide the same protection, but it is commonly thought that problems of adverse selection (of employers) would lead to private market failure. The universality of UI means that receipt of benefits is conditional only on job loss, and is not based on an individual's income or wealth. That universality is commonly considered a political strength of the program, as it is with Social Security.

Some important insurance principles are built into the UI system. Premiums are paid in advance through employer taxes on wages earned.[10] Individual eligibility requires earnings and employment experiences above a state-specified minimum, and entry into unemployment must be through involuntary job loss resulting from a list of acceptable causes. The covered earnings requirement means that eligible workers are those with some labor force attachment. Continued receipt of benefits requires being able, available for, and actively seeking full-time work, as determined through the UI work test administered by state Employment Service (ES) offices.

Coverage and Eligibility

The most significant changes in UI since 1935 are related to coverage. Over the years, various changes have widened the net of covered employment to include almost all wage and salary workers, with the exception of agricultural and household workers. Self-employed workers are still not covered under the program.

Eligibility criteria for receiving assistance, listed below, are based on monetary and nonmonetary determinations; the application of these criteria varies by state:

- record of recent earnings, over a base year
- length of job tenure (calendar quarters employed)
- cause of job loss
- ability and willingness to seek and accept suitable employment

7. As a result of various extensions, workers in these sectors are currently covered.
8. Congressional Budget Office (2006) reports that, for most of these people, UI provided the only income during their periods of unemployment.
9. Feldstein (2005) offers a succinct exposition of social insurance.
10. Taxes are levied on employers, but the incidence is likely passed on to employees.

Monetary eligibility is essentially a sufficient work history prior to job loss. Each state determines its own sufficient work history, relying on earnings during a base period.[11] Table A1 in the appendix reports the wide variation across states in monetary eligibility. Nonmonetary criteria pose more significant hurdles for many workers (Levine forthcoming). Most state programs insist only those workers who lose their jobs through no fault of their own, as determined by state law. In more detail, reasons for ineligibility of UI include the following:[12]

- voluntary separation from work without good cause
- inability or unwillingness to accept full-time work
- discharge for misconduct connected with work
- refusal of suitable work without good cause[13]
- unemployment resulting from a labor dispute

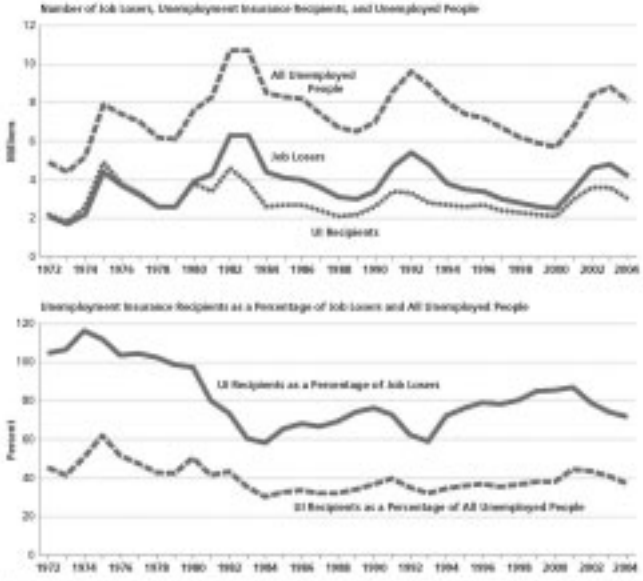
There is enormous variation across states in the definition of *good cause* for voluntary separation, i.e., leaving to accept other work, compulsory retirement, sexual or other harassment, domestic violence, and relocation to be with a spouse (U.S. Department of Labor 2008b). Forty-three programs restrict good cause to reasons connected to work.[14] Program discretion in setting these standards results in numerous inconsistencies. For example, workers who quit to move with a spouse and meet the monetary eligibility criteria are eligible to receive UI benefits in some programs—including California, Kansas, and New York—but not in others—including Connecticut, Delaware, the District of Columbia, and Massachusetts.[15] Workers who quit because they have been victims of sexual or other harassment are potentially eligible for UI benefits in all programs except six: Alabama, Georgia, Hawaii, Missouri, New Hampshire, and Vermont. Workers who voluntarily leave their jobs in anticipation of a plant closing in order to accept another job are potentially eligible for UI in many states, including California, Minnesota, New York, and Pennsylvania, but are ineligible in North Carolina, South Carolina, Tennessee, and West Virginia.[16] In a highly mobile society with integrated labor markets, it is difficult to imagine a plausible argument in support of these differences in state programs.

The base period monetary criteria are used as an imperfect proxy for labor market attachment. One unfortunate consequence is that some workers have insufficient work experience to meet the base period requirements, i.e., reentrants into the labor market who are actively seeking employment are not eligible for UI. As a result, women who decide to postpone returning to work after childbirth and workers who return to school or who take up training following a job loss can be ruled ineligible for UI. This is true despite the fact that their current or former employers paid UI taxes, and despite the likely satisfaction of monetary eligibility requirements for the immediate base period prior to the job loss.

The percent of total unemployed workers receiving assistance, the *recipiency rate*, has declined over the past two decades. The recipiency rate peaked in 1975 when half of all unemployed workers received UI. The rate fell to as low as 29 percent in 1984, before rebounding to 39 percent in 1991. Receipt of benefits increased to above 40 percent in 2001, 2002, and 2003, before falling back in 2004 (Figure 2). The average recipiency rate over the past 27 years is approximately 37 percent. In other words, in recent years only a little more than one-third of unemployed workers actually have received assistance under the UI program.

11. The base period is generally the first four of the last five completed calendar quarters before the job loss. For a worker losing a job in July 2008, the base period would be April 2007 through March 2008. The lag in a measure of a state where earnings reports had to be forwarded to a state employment office. Clearly, with improved information and communications technology, reporting can be done on a more timely basis. Some states use an alternative base year, defined as the past four completed calendar quarters, if the standard base year calculation leaves a worker ineligible for benefits (U.S. Department of Labor 2008c). See Levine (forthcoming) for a detailed discussion of the base year and its impact on benefit receipt of low-wage workers.
12. See U.S. Department of Labor (2008a) for details on nonmonetary eligibility.
13. Generally, workers receiving UI cannot refuse a job offer without good cause.
14. California, New York and eight other jurisdictions allow for good personal cause (U.S. Department of Labor 2008b).
15. The 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands administer the 53 UI federally approved UI programs.
16. This inconsistency in state UI eligibility criteria is particularly troublesome because it increases the costs associated with structural change.

FIGURE 2
Unemployed Workers, Job Losers, and UI Recipients, 1972–2003



Source: Congressional Budget Office 2004, Figure 3.

Benefit Levels

One of the initial goals of UI was to replace half of lost wages. Because of the federal-state nature of the program, each state sets its own minimum and maximum weekly benefit amounts. Although several states have set their maximum weekly benefit at approximately two-thirds the state weekly wage, currently only one state—Hawaii—has achieved the initial goal of actually replacing, on average, half of lost wages.

Almost all states set their maximum weekly benefits somewhere between $200 and $500, with the largest concentration of states between $300 and $400 (Table A1, in the appendix). Puerto Rico has the lowest maximum weekly benefit ($133). States with the highest maximum weekly benefits include Massachusetts ($551 to $626), Minnesota ($350 to $515), New Jersey ($521), and Rhode Island ($492 to $615; Department of Labor 2004b). The average weekly benefit in 2004 ranged

from $186.50 in Puerto Rico to $151.35 in Massachusetts. The average weekly benefit for the entire country was $262.91 (Council of Economic Advisers 2006, Table B-40). This average is almost 10 percent less than the weekly equivalent of the poverty level for a family of three that was set by the U.S. Census Bureau.[17]

The *replacement rate*, defined to average weekly benefits as a share of average weekly earnings, is a useful measure of benefit sufficiency.[18] The District of Columbia has the lowest replacement rate, less than one-fourth of average earnings. As mentioned above, Hawaii's UI program comes closest to replacing half of unemployed workers' average weekly earnings. Thirty-eight states have an average replacement rate of more than one-third but less than one-half of their workers' average weekly wages. The states with the lowest replacement rates include Alabama, Alaska, Arizona, California, Connecticut, Delaware, Louisiana, Maryland, Mississippi, Missouri, New York, Tennessee, and Virginia. The average replacement rate for the United States between 1975 and 2004 was 0.35, reaching as high as 0.38 in 1982 and as low as 0.31 in 1998 and 2000 (authors' calculations based on Department of Labor data).

Duration of Benefits

In the early years of the program, the duration of UI benefits was 12 to 20 weeks. Starting in the 1950s, a period of relatively low unemployment, a sizable number of states increased their UI duration to 26 weeks. By 1980, 42 states had a maximum duration of 26 weeks, and the duration for the 11 remaining programs was between 27 and 30 weeks (O'Leary and Wandner 1997, Table 15.3). Currently, all jurisdictions have a maximum duration of 26 weeks except Montana (28 weeks) and Massachusetts (30 weeks; Department of Labor 2006b).

Over the past 10 years, the average duration for receiving UI has ranged from a low of 13 weeks in 1989 to a high of 17.5 weeks in 1985, hovering around 15 weeks for most of the period (Figure 3). A sizable fraction of UI beneficiaries exhaust their benefits, i.e., remain unemployed beyond the period for which they can receive UI. The percent of workers who exhausted the benefits before finding reemployment ranged from a low of 23.8 in 1979 to a high of 41.5 in 2005. On average, approximately one-third of UI recipients exhaust their benefits before finding new jobs.

With the trend increase in the average duration of unemployment, the maximum period that workers can receive UI has fallen from two times to a little more than 1.5 times the average duration of unemployment. As with benefit levels, there does not appear to be any significant relationship between benefit duration and local labor market conditions.

Until the 1980s, the pattern of job loss in the United States was strongly cyclical. As a result, the number of unemployed and the duration of unemployment tended to increase during periods of economic slowdown and decrease during periods of recovery. According to this relationship, the share of unemployed workers who exhaust their benefits before finding new jobs would be expected to rise during and immediately after recessions.

Extended Benefit Programs

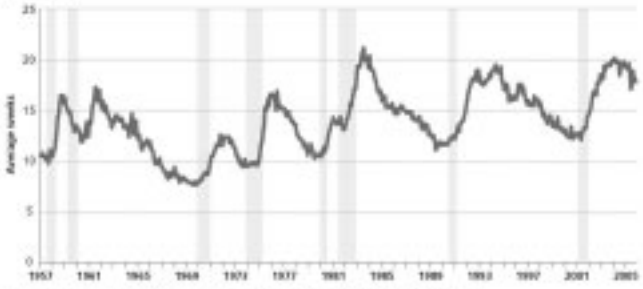
The UI system proved unable to respond to surges in unemployment during most of the cyclical downturns over the past half century. Increases in the duration of unemployment during and immediately following those recessions were the primary impetus for extending temporary UI beyond its base period (Figure 3). Congress enacted the first temporary extension of UI during the 1958 recession. In 1970, Congress enacted the Extended Benefit (EB) program with automatic triggers to provide assistance in a more orderly fashion. High rates of regular UI exhaustion, problems with the automatic triggers, and political pressures resulted in the need for subsequent congressional action to deal with heightened levels and prolonged duration of unemployment during recessions.

17. Annual incomes at and below $14,978, for a family of three, with one child under the age of 18, were defined as poverty level for 2004 (U.S. Census Bureau 2005).

18. Only average weekly earnings for UI recipients are used in calculating the replacement rate.

FIGURE 3

Average Duration of Unemployment Insurance Receipt, with Periods of Recession Highlighted, 1957–2005



Source: For duration: Bureau of Labor Statistics, and for business cycle timing: National Bureau of Economic Research (NBER).

Under the current program, UI benefits can be extended for an additional 13 weeks when the unemployment rate of covered workers (the Insured Unemployment Rate, or IUR) during the previous 13 weeks was (1) at least 5 percent and (2) 20 percent higher than during the same 13-week period of the previous two years. Since states are required to finance half of the extended benefit programs, they are free to adjust this trigger.[11]

Changes in the labor market and in the UI program, combined with the static nature of the triggers, have produced an extended benefit system that is not automatic. As a result, Congress has occasionally found it necessary to extend UI through the Temporary Extended Unemployment Compensation program. Since the 1980s, the standard extended benefit program has provided a smaller share of assistance to unemployed workers than the emergency extensions of UI enacted by Congress.

Although helpful to millions of workers, these temporary stopgap measures have politicized unemployment assistance, thereby undermining one of the initial goals of the UI program. These temporary programs have proven to be clumsy, typically being enacted after hundreds of thousands of workers have already exhausted their UI. In addition, the sunset provisions are arbitrarily set and usually fall before employment has recovered. Overall, the nation's UI program has become less automatic and more dependent on congressional action in response to prolonged periods of economic slowdown.

Financing UI

UI is financed by a combination of federal and state payroll taxes. Revenue from the federal payroll tax is used to finance the costs incurred by federal and state governments in administering the UI program and to cover loans to states that exhaust their regular UI funds. States are required to raise the necessary revenue

11. Optional triggers include ones when the IUR for the previous 13 weeks is above 6 percent, regardless of its performance over the previous two years, and ones when the seasonal adjusted unemployment rate for all civilian employees, i.e., the Total Unemployment Rate (TUR), is at least 6.5 percent and 110 percent higher than the rate for the same three months period in either of the two previous years. Benefits can be provided for an additional 13 or 20 weeks if the TUR is at least 8 percent and 10 percent higher than the rate for the same three month period in either of the two previous years.

to finance regular UI benefits paid to their unemployed workers. Federal and state governments share the costs of financing benefits under the automatic extended benefit program. Currently, federal taxes finance 17 percent of the UI program. The remaining 83 percent is financed by state taxes. Temporary extended UI programs enacted by Congress have typically been financed by federal budgetary expenditures without any specific revenue offset.

The federal tax established by the Federal Unemployment Tax Act (FUTA) is currently 6.2 percent on the first $7,000 of annual salary by covered employers on behalf of covered employees.[10] Employers must pay the tax on behalf of employees who earn at least $1,500 during a calendar quarter. Employers receive a 5.4 percent credit against the tax, making the effective FUTA tax rate 0.8 percent.[11] The bottom line is that the federal tax is trivial. A maximum of $56 is collected annually for each worker who is covered under the program.

There have been few adjustments in the FUTA taxable wage base since it was first established in 1939. The wage base, originally set at $3,000, remained fixed for 32 years, until 1972, when it was raised to $4,200. That increase kept the taxable wage base in line with its real value in 1940. Congress raised the federal taxable wage base to $6,000 in 1978 and to $7,000 in 1983, where it has remained for the past 22 years. Had the taxable wage base been adjusted for inflation over the past 65 years, it would currently be about $45,000 (figure 4).

If the taxable wage base were adjusted to $45,000, the net federal tax rate, i.e., the tax rate minus the credit, could be reduced by half, to 0.4 percent, and generate the same amount of revenue that is currently being collected.[12] Although it is unrealistic to expect an adjustment of this magnitude anytime soon, any increase in the wage base to make up for the erosion in its real value over the past two decades could provide additional funding for providing assistance to workers in need, or could enable the federal government to reduce the FUTA tax rate, or both. Most importantly, adjusting the wage base upward would reduce the regressive nature of the tax. Under the current structure, the FUTA tax accounts for a larger share of lower income workers' wages. Adjusting for inflation alone, as many states have been doing for their own UI taxes, would increase the federal taxable wage base fivefold, make the system more progressive, and provide additional revenues to the system.

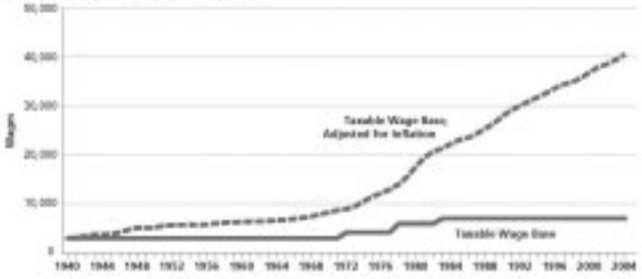
Twenty-seven jurisdictions set their taxable wage base below $10,000, of those programs, 10 set their taxable wage base at $7,000, the same as the federal taxable wage base (Table A1, in the appendix). Twelve programs set their taxable wage base above $20,000, close to three times the taxable wage base set by the federal government. The states with the highest taxable wage base include North Dakota ($20,900), Montana ($21,600), Iowa ($22,000), Minnesota, Nevada, and Utah (each with taxable wage bases of $24,000), New Jersey ($25,900), Oregon ($28,000), Arkansas ($28,700), Idaho ($29,500), Washington ($40, 900), and Hawaii ($34,800). U.S. Department of Labor 2006a). The weighted average taxable wage base for all 53 UI programs is $11,101.

Federal guidelines dictate that states have in place UI payroll tax systems that are experience rated. With experience rating, firms that lay off fewer workers face a lower tax rate on their payroll. States have the discretion to structure their own experience rating system, and those systems, as with the tax rates, vary considerably among the states.

The average UI tax rates vary among jurisdictions from 0.38 percent in the Virgin Islands to 1.89 percent in Arkansas. Forty-four jurisdictions have average UI tax rates below 1.0 percent, while 6 jurisdictions – Illinois, Massachusetts, Mississippi, Pennsylvania, Puerto Rico, and Rhode Island—have average tax rates between

10. The 6.2 percent includes a 0.2 percent surtax initially passed by Congress in 1976, designed to replenish the UI trust fund. The surtax is scheduled to expire on December 31, 2007.
11. This credit is available only to employers in jurisdictions that have approved UI programs. All jurisdictions currently have approved programs.
12. This estimate is based on the current number of workers covered.

FIGURE 4
Federal Taxable Wage Base, 1940–2004



Source: Authors' calculations based on data from U.S. Department of Labor.

1.0 and 1.5 percent, and three programs—Arkansas, Oregon, and Washington—have the highest UI tax rates, of over 1.5 percent. The average tax rate for the 53 UI programs is 0.82 percent.[13]

Some aspects of the current UI system work well and deserve to be highlighted. Examples are the contributions of the UI program to income smoothing and consumption smoothing and insuring workers against the risk of job loss (see Gruber 1997 and Chetty 2004, among others). UI constitutes an important source of income for unemployed workers and their families, particularly for the long-term unemployed. The Congressional Budget Office (2004) reports that UI benefits played a significant role in maintaining the family income of recipients who experienced long-term spells of unemployment in 2001 and early 2002, particularly for those families that had only one wage earner. Before becoming unemployed, recipients' average family income was about $9,800 per month. When recipients lost their job, this income—excluding UI benefits—dropped by almost 60 percent. Including UI benefits reduced the income loss to about 40 percent.[14]

13. Tax rates equal UI tax collections as a percent of total wages in taxable employment (U.S. Department of Labor 2006c).
14. Long-term recipients are defined in that report as unemployed workers who received UI benefits for a spell of at least four consecutive months, in 2001 or early 2002.

III. A Major Makeover for UI

In recent years, the U.S. labor market has come under increased pressure from intensified domestic and international competition. These pressures have changed the nature of job turnover in the United States. Unlike the cyclical job losses that characterized the labor market and economy from 1945 to the 1980s, job losses are now related more to structural factors, with workers simultaneously changing jobs, industries, and occupations. The current UI program, though, is fighting the last battle, one of widespread temporary layoff, where workers were attached to a single employer.

As discussed above, current labor market conditions differ a great deal from those that existed in 1935, suggesting that it is time to revisit some of the fundamental elements of the original UI program. The reforms we outline below maintain the basic structure of UI, while enhancing its efficiency, reach, and impact to reflect the changes in the labor market since the program was designed. Before turning to the specific changes, it is worth examining why we retain the basic structure of the program. After seven decades of experience, there is widespread agreement that the government should play an important role in providing insurance against job loss and income support to smooth consumption.[23] The basic structure of UI serves that function well, even though changes are necessary to update the precise details of the program. Furthermore, in our view, the current structure of UI does not create substantial economic costs. Although we acknowledge the potential distortions associated with the current UI structure, the empirical evidence on the size of the impact of these distortions is mixed. For employers, UI may subsidize the use of temporary layoffs, but experience rating is intended to address this distortion. To be sure, the degree of experience rating is imperfect; that is, the tax rate faced by a firm does not increase one for one with increased use of temporary layoffs.[24] More progress toward perfect experience rating may reduce the subsidization of temporary layoffs, although with the trend decline in temporary layoffs, further adjustments in this area appear to be of secondary importance.

For individual workers, the most prominent distortion is the reduced incentive to save for unemployment spells and the reduced incentive to begin a search for a new job immediately after separation.[25] A sizable literature has established a link between receipt of UI and longer unemployment duration.[26] The magnitude of the effect, however, is not overwhelming, and longer job searches may lead to more productive job matches, although the evidence is admittedly mixed on this latter point. Furthermore, as Feldstein (2005) notes, it is important to note that these disincentives are a result of specific program designs, and are not inherent in the program itself. In other words, evidence of the distortions and their effects on the overall economy should not serve as an indictment of the entire UI system; rather, they are known and understandable implications of government intervention and should be addressed when possible. The broader point is that it is important to balance any costs of the distortions against the benefits of the program.

The following is an outline of proposals for reforming the current UI program. Estimates of increased costs and

23. Even those who call for UI reform centered on personalized accounts (for example, Feldstein 2005 and Illing 1996) agree that the government should play a central role in insuring the unemployed.

24. The degree of experience rating is typically measured by the marginal tax rate (MTR) to the firm from an additional dollar of UI benefits paid to one of its former workers. The MTR is the present value of the additional tax payments by the firm to the state UI system, associated with the payment by the state to the worker of an additional dollar of benefits. If the MTR is less than one, the firm does not bear the full cost of the UI benefits received by its laid-off workers.

25. Engen and Gruber (2001) present evidence that UI receipt crowds out household savings, although the effect is small in dollar terms, consistent with the small average savings of many families in the United States.

26. See references in Rhum 1991.

revenues associated with these proposals are included. Although each proposal can be evaluated and implemented separately, it would be preferable to enact them all.

Strengthen the Federal Leadership Role in UI

As documented in Section 1, the nature of unemployment in the United States has shifted from cyclical to structural. Although there clearly remain some differences in local labor market conditions, the current pressures on the U.S. labor market are becoming more universal. As also documented in Section 1, state differences in the incidence and experience of unemployment have narrowed considerably. Local labor market conditions primarily affect the prospects for reemployment. Given the increasingly national nature of the labor market, UI would better meet its original objectives if the federal government played a more prominent role in this partnership.

When UI was created, there was considerable congressional debate over the state and federal governments' roles. At the time, there was broad consensus that Social Security, established by the same legislation that created UI, should be administered, financed, and managed by the federal government. Although there were no economic reasons for the treatment of UI to be different from the treatment of Social Security, Congress was concerned about infringing on states that had already established their own UI programs, e.g., Massachusetts, Ohio, and Wisconsin.[10] The compromise adopted by Congress was a federal-state hybrid, giving the federal government responsibility over administering and financing the costs associated with administering the UI program, and placing the responsibility for delivering the actual assistance and financing that assistance with the states. Congress agreed to rebate most of the federal tax for states that conformed to federal UI standards (Blaustein 1993).

After 70 years, the result of this compromise is a patchwork system of 53 UI programs, each with different eligibility criteria and benefit levels. Our analysis shows that, since UI was established, unemployment and its associated costs have become more national. Despite these changes, the likelihood that an unemployed worker will receive assistance, and the extent of that assistance, depends on where that worker resides.[11]

In addition to inequities created by disparate rules across states, a significant downside of the current federal-state partnership is the states' real or perceived fears that program generosity will result in adverse changes to their business environment. Federal leadership would avoid interstate competition and a "race to the bottom" in program benefits.[12]

An increased leadership role for the federal government would be characterized by expanding standards for eligibility, duration, and level of benefits; and for financing the program. We sketch the relevant changes below.

Eligibility

- Standardize the base period for determining eligibility to the past four complete calendar quarters prior to job loss. This change, already implemented by a number of states, updates the operational definition of labor market attachment, and reflects the reduced time needed to report earnings.

- Use hours rather than earnings in determining eligibility (Levine forthcoming). Shifting the determina-

10. Baicker and colleagues (1997) present a discussion of the reasons why Social Security and UI were initially set up under different models. At the time, there were no precedents for large-scale government income-transfer programs, based on the experiences of the Great Depression, it was feared that there could potentially be many more unemployed than retired workers. In fact, the opposite is now the case. There was more public support for providing income support to older people than to workers, especially given the evidence that many older people were living in poverty. From an administrative standpoint, some states had already established limited forms of UI and Congress wanted to encourage more states to adopt similar programs. As a result of these factors, the 1935 Act established a single federal Social Security program for all participants and set standards and incentives to encourage each of the states to establish its own UI program.

11. Baicker and colleagues (1997) argue that recent changes in the labor market suggest that UI's initial structure should be reconsidered.

12. Blaustein (1993) reports that, in 1931, then-Governor Franklin D. Roosevelt (New York) invited governors of six other states to meet with him to explore the possibility of simultaneous action by the states. In his opening talk, Roosevelt said, "All states act, or three will be no action" (p. 118).

tion of eligibility to hours rather than earnings would bring more low- and moderate-wage workers—who often most need help during periods of unemployment—into the system.

■ Harmonize nonmonetary eligibility standards. The patchwork of nonmonetary eligibility criteria, whereby some states consider voluntary separations for good cause, while others do not, creates unnecessary complexity and inequities in the system.

■ Enable reentrants to the labor force, if determined eligible at the time of job loss or separation, to be eligible to receive the benefits they would have received at the time of job loss. In a fluid labor market, many workers may leave the labor force for some time (e.g., to care for a child or parent) and then return. If the workers had been eligible for UI when they separated from their previous job but did not claim them at that time, they should be eligible for benefits when they return to the labor force.

■ Amend the work test to allow job search for part-time employment. Part-time work is a common feature of the current labor market, accounting for 18 percent of employment in July 2006, and unemployed workers should not be disqualified from receiving benefits because they are searching for part-time work.

The share of unemployed workers who actually received assistance under the UI program averaged 37 percent between 1980 and 2005. The proposals outlined above are designed to increase the number and share of unemployed workers eligible to receive assistance. Given the difficulties associated with precise estimation of how much each of the individual proposals would contribute to increasing the number of potentially eligible workers, we instead estimate the costs associated with raising the recipiency rate in increments to 90 percent (Table 3), which is a reasonable objective for the changes delineated above.

Table 3

Estimated Costs Associated with Increasing the Recipiency Rate

Recipiency rate	Increase in number of workers eligible*	Increase in total benefits paid*
0.40	220,000	$1.6 billion
0.45	620,000	$4.5 billion
0.50	1,000,000	$7.4 billion

Source: Authors' calculations.
*Represents workers and costs (benefits paid) relative to 26 year average.

Benefit Levels and Duration of Benefit Receipt

■ Standardize benefit levels to at least half of lost earnings with a maximum weekly benefit equal to two-thirds of state average weekly earnings. Table 3 provides budgetary estimates for raising the replacement rate in this manner.

■ Develop standard rules to cover benefits for partial unemployment (reduced hours). Standardizing these rules would help to update the program to reflect new labor market realities; California is among the few states with UI for partial unemployment.

■ Establish uniform duration of a minimum of 26 weeks in all programs.

■ Fix the extended benefit triggers so that they are more automatic and workers can receive assistance during economic downturns without disruption.

■ Make benefits more responsive to work experience and local labor market conditions. Currently, UI benefits are set arbitrarily, primarily based on a state's ability and willingness to pay. In general, benefits do not currently reflect an employee's work experience, nor (and even importantly) do they reflect the costs associated with that worker's job loss, including the potential difficulty in finding a new job. We recommend setting benefit levels according to a formula based on a number of factors, including wage history, local labor market conditions, and reason for separation. Workers living in regions with poor labor market conditions might receive a higher level of assistance, or receive assistance for longer periods, or both.

■ Standardize allowances for dependents across all states.

TABLE 3
Estimates of Costs Associated with Increasing the Replacement Rate

Replacement rate	Average weekly benefit at new replacement rate	Increase in average weekly benefit	Increase in total benefits at new replacement rate
40 percent	$295.67	$54.00	$8.3 billion
45 percent	$332.63	$79.96	$8.7 billion
50 percent	$369.59	$107.92	$11.1 billion

Source: Authors' calculations.
Note: Estimates based on the following assumptions: The average replacement rate between 1980 and 2002 was 35.8 percent, the average weekly benefit in 2002 was $240.63, the average weekly wage in 2002 was $736.8, & the total number of weeks of compensation in December 2002 was slightly fewer than 10 million.

Financing

■ Increase the FUTA taxable wage base, in steps, to $45,000. The last time the UI taxable wage base was adjusted was more than 20 years ago. As a result, the payroll tax is extremely regressive. Raising the taxable wage base to $45,000 would have the benefit of making the tax more progressive while generating new revenue to finance needed reforms to the program. We estimate that increasing the taxable wage base to $45,000 while maintaining the same tax rate would generate $8.7 billion in increased revenue. This would be enough to finance the costs associated with providing an ear mainstreet (i.e., raising the replacement rate) to more workers (i.e., increasing the recipiency rate).

Local or regional wage differences, or both, would be respected under this plan, because the harmonization of benefits would be in percentages of earnings, not dollar levels. Treating workers more equally, in terms of program standards, would remove differences that have little or no justification, other than tradition. Given their long experience in providing these services, local and state providers would remain primarily responsible for unemployment insurance, job training, intake, and administration of benefits.

Enable Individuals to Contribute to Private Unemployment Accounts.

Workers who do not have traditional relationships with employers are currently not covered by UI. In order to address this shortfall, individuals, initially the self-employed, would be able to establish and make tax-advantaged contributions, up to a maximum of $2000 per year, to their own private unemployment accounts.[10]

Cost estimates for one version of a tax-advantaged saving program are based on the assumptions that participants begin making contributions at age 30; that the starting wage is $30,000, and that wages increase by 3 percent per year; that the participant and the government each contributes 0.25 percent of wages each year into the fund; that the real annual interest rate on the fund is 2 percent; that contributions to and existing funds in these personal saving accounts would not be taxed; and that one-fourth of the self-employed—approximately 2.5 million—would voluntarily participate in the program.[11]

Participants would be able to draw on these funds in order to cushion severe income losses or finance training and job search associated with changing jobs, and withdrawals would be taxed as income.[12] All remaining funds after age 62 would be transferred to existing retirement savings accounts.

11. Eventually, this program might be extended to workers who voluntarily leave their jobs for reasons now currently allowed under the program.
11. The assumed take-up rate for these private unemployment accounts is much higher than the 10 percent take-up rate for individual Retirement Accounts (IRAs). Unlike IRAs, PUAs would allow workers to accumulate tax-advantaged savings to be accessed in the event of unemployment. In addition, under this program, a worker's contribution would be matched dollar for dollar by the government.
14. Under the income tax system, the value of the government subsidy under this saving scheme would be larger for higher income people. See Eschtruth and colleagues (2006) for a discussion of alternative methods of tax treatment.

Based on these assumptions, each participant's fund would grow to approximately $11,000 by the time the worker turned 62. The cost to the government for each worker would be an average of approximately $125 per year, and an average of approximately $300 million per year for the entire program.[35]

Augment UI with a Program of Wage-Loss Insurance.[36]

For some unemployed workers, particularly older workers, the costs of job loss extend beyond unemployment, because new job earnings tend to be lower than old job earnings. Wage-loss insurance offers assistance that is tailored to actual earnings losses. We propose that a wage-loss insurance program be offered in addition to, and not instead of, UI.[37] As proposed in Kletzer and Litan (2001), eligible workers would receive some fraction, perhaps half, of their weekly earnings loss. The fraction could vary by age and worker tenure. Workers who find a new full-time job within 26 weeks of separation would be eligible for wage-loss insurance, potentially reducing the period of UI receipt.

For example, if an eligible unemployed worker earned $600 per week on the previous full-time job and found a new full-time job paying $520 (which is 13 percent less), the supplemental payment would be $40 per week, bringing the total weekly earnings to $560. At a 30 percent earnings loss, the new job would pay $420 per week and the weekly payment would be $90, making the total weekly earnings $510. Although wage-loss insurance might encourage a worker to take a job paying significantly less than his previous job, the supplemental payment would reduce the earnings loss by half.

The Trade Act of 2002, in its reauthorization of Trade Adjustment Assistance (TAA), added a limited program of wage-loss insurance. Called Alternative Trade Adjustment Assistance (ATAA), workers who are more than 50 years old and earning less than $50,000 a year may be eligible to receive half the difference between their previous and new earnings, subject to a cap of $10,000, for up to two years. Workers must find a new full-time job and enroll in the ATAA program within 26 weeks of job loss and cannot receive other income support or training under TAA.[38]

Wage-loss insurance raises the return to job search, especially for workers with greater reemployment losses. A higher wage-loss insurance replacement rate further increases the return to job search, while it reduces a worker's incentive to search for another, higher-paying job.[39] If the supplement interval is fixed and limited relative to the date of job loss, the present value of the supplement declines with the duration of unemployment and poses an incentive for a quicker return to work. As a result, workers who have difficulty finding a job, particularly if it is required to be a full-time job, will receive a smaller supplement than workers with short unemployment spells. This effect does not hold if the duration of wage-loss insurance is linked to time on the new job, rather than time since separating from the previous job.

A wage-loss insurance program will be of greatest value to high-tenure, lower-skilled manufacturing workers. These workers are not high-wage workers; they are earning a wage premium over their alternative. As a result, wage-loss insurance is more valuable to these workers than it is to lower-wage workers. It is less likely that lower-wage displaced workers will experience large earnings losses. This introduces a potentially important distributional issue.

Despite its benefits, wage-loss insurance is not a perfect solution to addressing the costs associated with unem-

35. This estimate does not include lost tax revenue as a result of the accounts' tax-advantaged status.
36. This section borrows from Kletzer (2004).
37. Wage-loss insurance has come close to [illegible] in the literature of optimal UI policy design, most clearly as a response to moral hazard concerns arising from a UI recipient worker's reduced incentive to leave unemployment due to a reduction in the net return to accepting a job. Baily (1978) proposes [illegible] redundancy payments (equal to expected earnings loss), to be followed by a lower payout for incremental weeks of unemployment. This [illegible] compensation for job loss from UI and avoids creating an incentive for extending a spell of unemployment. See Parsons (2000) for a more complete discussion.
38. See Kletzer and Rosen (2005) for a detailed discussion of ATAA and possible extensions.
39. This effect pertains only to the period of eligibility.

ployment. Restricting wage-loss insurance eligibility to full-time employment raises some questions. Earnings losses are a product of both changes in wages and in hours. Either wages or hours, or both, could be lower on the new job. Particularly for lower-skilled workers, most readily available jobs will be part time, as well as at low wage rates. Limiting benefits to those who find one of a scarce supply of full-time jobs is unnecessarily rewarding the winners twice. On the other hand, if the supplement is applied to earnings losses arising from changes in hours worked, effective pay on new part-time jobs could be quite high. For example, as discussed by Parsons (2000), if a particular worker's earnings loss arises solely from working part time on the new job, that worker will have an opportunity to work half the hours she was working on her previous job, at three-fourths of the pay. This level of subsidy could induce a sizable shift to part-time work.

Structuring a program with a relatively short eligibility period, starting with the date of job loss, creates a reemployment incentive, and addresses one of the most commonly expressed UI concerns, but it also limits the compensatory nature of the program. Displaced worker earnings losses are long term (i.e., earnings losses exist five to six years after job loss), well beyond the two years covered by ATAA (Jacobson and colleagues 1993).

The costs of a wage-loss insurance program depend critically on the number of eligible workers, the earnings losses of those reemployed at lower pay, and the duration of unemployment prior to reemployment. (The time it takes to find a job is a common program trigger.) Other critical program characteristics include the duration of wage-loss insurance payments, the annual cap on program payments, and the replacement rate. Based on a program with a two-year duration, a 50 percent replacement rate and a $10,000 annual cap, Brainard and colleagues (2006) estimate that the cost of providing wage-loss insurance for all dislocated workers would be $4.3 billion (in current dollars) for 2003. The same basic program, in 2000, when unemployment was lower and fewer workers experienced a wage loss upon reemployment, was estimated to cost $2.6 billion.[40]

An expanded wage-loss insurance program could be financed through general government revenues or by raising the FUTA taxable wage base or tax rate. Augmenting UI with assistance tailored to the size of reemployment earnings losses, is possible with relatively small changes in UI program parameters.

More generally, regarding reemployment, the current UI system has a limited relationship with efforts to transition workers back to employment. The Worker Profiling system targets resources to workers at risk of exhausting benefits. Workers receiving UI are required to prove that they are actively seeking employment, primarily by documenting job inquiries and interviews. Most unemployment spells (and benefit receipt) are too short for serious training, but job search assistance can be short term with high returns, given its relatively low cost. With the rise in structural unemployment, training needs are likely to expand.[41]

40. These estimates do not reflect possible savings from reduced duration of UI receipt due to the reemployment incentive. For more details on the estimates, see Brainard and colleagues (2006), Table 7.

41. There is a bureaucratic wall of separation between UI and federally supported training programs in the United States. In any event, the amount of funds currently appropriated for training is inadequate to provide any kind of serious training to all long-term unemployed workers.

IV. Conclusion

The federal-state structure of UI is a relic of its 1935 establishment, and a Depression-era concern over the constitutionality of plans for the federal government to levy taxes for unemployment assistance. Federal programs are now well established. More importantly, changes necessary to move UI into the twenty-first century require significant federal leadership. The very basic structure of UI must be reformed, broadening from the single-employer, full-time worker, temporary layoff model to an approach that accommodates permanent job loss, part-time or contingent work, self-employment, and the incidence of job loss and national, rather than local or regional, unemployment. American workers are currently facing considerable pressure due to continued technological change and intensified competition resulting from globalization. Despite significant changes in U.S. labor market conditions, there have been no major changes in the basic structure of UI since it was established 70 years ago. Reforming the nation's UI program is necessary in order to make it relevant to the labor market of the twenty-first century.

Appendix

TABLE A1
State UI Program Statistics

State	Average annual earnings	Annual earnings required for eligibility	Maximum weekly benefit amount	Taxable base	Minimum, maximum, and new employer tax rates
AL	$32,640	$2,114	$230	$8,000	0.44%, 6.04%, 2.70%
AK	$37,170	$1,800	$249–$370	$28,700	1.21%, 5.40%, 4.15%
AZ	$36,817	$2,230	$240	$7,000	0.08%, 5.40%, 2.80%
AR	$29,563	$1,836	$393	$10,000	0.1%, 10.00%, 2.80%
CA	$46,096	$1,125	$450	$7,000	1.5%, 5.40%, 3.40%
CO	$40,139	$2,500	$415	$10,000	0.3%, 5.40%, 1.70%
CT	$52,677	$780	$465–$540	$15,000	0.5%, 5.40%, 2.90%
DE	$42,633	$820 (or 2 HQs)	$330	$8,500	0.3%, 8.20%, 2.20%
DC	$67,271	$1,850	$359	$9,000	1.5%, 6.60%, 2.70%
FL	$34,362	$3,400	$275	$7,000	0.32%, 5.40%, 2.70%
GA	$38,174	$1,880	$330	$8,500	0.06%, 8.21%, 2.70%
HI	$33,233	$180	$489	$34,000	0%, 5.40%, 2.40%
ID	$29,206	$1,656	$332	$28,200	0.477%, 5.40%, 1.67%
IL	$42,547	$1,600	$350–$475	$11,000	0.3%, 8.10%, 3.40%
IN	$34,890	$2,750	$390	$7,000	1.1%, 5.60%, 2.70%
IA	$37,797	$1,380	$338–$410	$22,000	0%, 8.0%, 1.0%
KS	$32,218	$2,790	$386	$8,000	0.07%, 7.40%, 4.33%
KY	$32,894	$2,845	$401	$8,000	0.5%, 9.50%, 2.70%
LA	$31,373	$1,200	$238	$7,000	0.1%, 6.20%, industry avg.
ME	$30,838	$3,812	$320–$480	$12,000	0.66%, 5.40%, 1.78%
MD	$41,051	$800	$340	$8,500	0.6%, 9.0%, 2.30%
MA	$49,808	$2,800	$551–$835	$14,000	1.12%, 10.96%, 2.53%
MI	$40,945	$2,968	$362	$9,000	0.06%, 10.80%, 2.70%
MN	$40,832	$1,250	$350–$515	$24,000	0.2% + 16% of taxes due, 9.1% + 16% of taxes due, 2.32% + 16% of taxes due
MS	$27,736	$1,200	$210	$7,000	0.4%, 5.40%, 2.70%
MO	$33,823	$1,890	$210	$11,000	0%, 6.0%, 2.70%
MT	$26,672	$5,800 (or 2 HQs)	$362	$21,600	0.13%, 6.50%, industry avg.
NE	$30,750	$2,500	$286	$9,000	0.39%, 6.76%, 2.50%
NV	$30,372	$600	$362	$24,000	0.25%, 5.40%, 2.95%
NH	$38,999	$2,800	$372	$8,000	0.01%, 6.90%, 2.70%
NJ	$47,894	$2,480	$521	$29,800	0.3825%, 5.40%, 2.68%
NM	$29,736	$1,799	$312–$360	$17,900	0.09%, 5.40%, 2.0%
NY	$52,706	$2,400	$405	$8,500	0.9%, 8.90%, 3.40%
NC	$33,479	$2,748	$487	$17,000	0%, 5.70%, 1.20%

Source: U.S. Department of Labor, 2006.
HQ = high-quarter, AWW = average weekly wage.

TABLE A1

State UI Program Statistics (continued)

State	Average annual earnings	Annual earnings required for eligibility	Maximum weekly benefit amount	Taxable base	Minimum, maximum, and new employer tax rates
ND	$38,930	$2,795	$391	$20,300	0.4%, 9.44%, 1.87%
OH	$35,193	$3,840	$343–$462	$9,000	0.5%, 10.0%, 2.70%
OK	$30,043	$1,500	$217	$13,500	0.2%, 7.40%, 1.80%
OR	$34,982	$6,080	$489	$28,000	1.2%, 5.40%, 3.10%
PA	$38,168	$1,320	$481–$595	$8,000	0.3%, 9.20%, 3.50%
PR	$20,091	$280	$133	$7,000	1.4%, 5.40%, 1% of taxes due
RI	$35,788	$2,810	$498–$615	$16,000	1.69%, 9.79%, 2.84%
SC	$31,261	$800	$383	$7,000	1.24%, 6.10%, 2.64%
SD	$27,010	$1,288	$274	$7,000	0%, 7.0%, 1.20%
TN	$34,618	$1,560	$275	$7,000	0.15%, 10.0%, 2.70%
TX	$39,003	$2,835	$450	$9,000	0.4%, 7.64%, 2.70%
UT	$31,329	$2,600	$383	$24,000	0.8%, 8.40%, 1.80%
VT	$32,626	$2,582	$384	$8,000	0.8%, 8.50%, 1.0%
VA	$39,823	$1,599 (in 2 HQs)	$347	$8,000	0.1%, 6.20%, 2.50%
VI	$40,083	$1,287	$418	$28,000	0%, 6.0%, 1.0%
WA	$38,723	$5,819 (in 2 HQs)	Lesser of $496 or 63% of AWW	$39,900	0.41%, 6.12%, industry avg. + 15%
WV	$29,189	$2,200	$391	$9,000	1.5%, 7.90%, 2.70%
WI	$34,189	$1,930	$341	$14,000	0%, 8.90%, 3.25% or 3.40%
WY	$30,722	$2,200	$349	$17,100	0.54%, 9.04%, industry avg.

Source: U.S. Department of Labor (2008a, 2008b).
HQ = high-quarter; AWW = average weekly wage.

References

Advisory Council on Unemployment Compensation. 1996a. Collected findings and recommendations: 1994-1996. Advisory Council on Unemployment Compensation, Washington, DC.

Advisory Council on Unemployment Compensation. 1996b. Defining federal and state roles in unemployment insurance: Reports to the president and Congress. Advisory Council on Unemployment Compensation, Washington, DC. January.

Barker, Katherine, Claudio Goldin, and Lawrence F. Katz. 1997. A distinctive system: Origin and impact of U.S. unemployment compensation. Working Paper 5889, National Bureau of Economic Research, Cambridge, MA. January.

Baily, Martin Neil. 1978. Some aspects of optimal unemployment insurance. *Journal of Public Economics* 10: 379–402.

Bartelsman, Lily L., Fred T. Goldberg, and Peter Orszag. 2006. Reforming an incentive into uniform refundable tax credits. Brookings Policy Brief 156, The Brookings Institution, Washington, DC. August.

Blaustein, Saul J. 1993. *Unemployment Insurance in the United States: The First Half Century*. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.

Brainard, Lael, Robert E. Litan, and Nicholas Warren. 2006. A fairer deal for America's workers in a new era of offshoring. In *Brookings Trade Forum 2005: Offshoring White-Collar Work*, Susan M. Collins and Lael Brainard, eds. Washington, DC: Brookings Institution Press, 427–56.

Bureau of Labor Statistics. Various years. Statistics on employment and unemployment. http://www.bls.gov/bls/employment.htm

Chetty, Raj. 2004. Optimal unemployment insurance when income effects are large. Working Paper 10500, National Bureau of Economic Research, Cambridge, MA. (May).

Congressional Budget Office. See U.S. Congress.

Council of Economic Advisers. 2006. Economic report of the president. Council of Economic Advisers, Washington, DC. http://www.gpoaccess.gov/eop/2006/2006_erp.pdf.

Davis, Steven J., John C. Haltiwanger, and Scott Schuh. 1996. *Job Creation and Destruction*. Cambridge, MA: MIT Press.

Engen, Eric M., and Jonathan Gruber. 2001. Unemployment insurance and precautionary saving. *Journal of Monetary Economics* 47: 545–79.

Feldstein, Martin. 2005. Rethinking social insurance. *American Economic Review* 95 (1): 1–24.

Gruber, Erin L., and Simon Potter. 2003. Has structural change contributed to a jobless recovery? *Current Issues in Economics and Finance* (Federal Reserve Bank of New York) 9 (8).

Gruber, Jonathan. 1997. The consumption smoothing benefits of unemployment insurance. *American Economic Review* 87 (1): 192–205.

Hipple, Steven. 2004. Self-employment in the United States: An update. *Monthly Labor Review* 127 (7): 13–23.

Jacobson, Louis, Robert LaLonde, and Daniel Sullivan. 1993. *The Cost of Worker Dislocation*. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.

Klein, Michael W., Scott Schuh, and Robert K. Triest. 2003. *Job Creation, Job Destruction, and International Competition*. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.

Kletzer, Lori G. 2004. Trade-related job loss and wage insurance: A synthetic review. *Review of International Economics* 12 (5).

Kletzer, Lori G., and Robert E. Litan. 2001. A prescription to relieve worker anxiety. Policy Brief PB01-2, Institute for International Economics, Washington, DC.

Kletzer, Lori G., J. David Richardson, and Howard F. Rosen. Forthcoming. Forging a grand bargain: Expanding trade and raising worker prosperity. Institute for International Economics, Washington, DC.

Kletzer, Lori G., and Howard F. Rosen. 2005. Easing the adjustment burden on U.S. workers. In *The United States and the World Economy*, C. Fred Bergsten, ed. Washington, DC: Institute for International Economics.

Kling, Jeffrey. 2006. Wage-loss insurance and temporary earnings replacement accounts. Discussion Paper 1066-05, The Hamilton Project, Washington, DC. (Superseded).

Levine, Phillip B. Forthcoming. Unemployment insurance over the business cycle: Does it meet the needs of liquidity-realized In *Working and Poor: How Economic and Policy Changes Are Affecting Low-Wage Workers*, Rebecca Blank, Sheldon Danziger, and Robert Shorat, eds. New York: Russell Sage Foundation.

McConnell, Margaret M., and Joseph M. Tracy. 2008. Unemployment insurance and the diminished importance of temporary layoffs over the business cycle. Federal Reserve Bank of New York, New York. Photocopy (May).

Meyer, Bruce D. 1995. Lessons from the U.S. unemployment insurance experiments. *Journal of Economic Literature* 33 (March): 91–131.

National Bureau of Economic Research. 2003. U.S. business cycle expansions and contractions. www.nber.org/cycles.html.

O'Leary, Christopher J., and Stephen A. Wandner. 1997. Summing up. In *Unemployment Insurance in the United States: Analysis of Policy Issues*, C. J. O'Leary and S. A. Wandner, eds. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 669–733.

Parsons, Donald O. 2000. Wage insurance: A policy review. *Research in Employment Policy* 2: 113–46.

U.S. Census Bureau. 2005. Income, earnings and poverty from the 2004 American community survey. Government Printing Office, Washington DC. August.

U.S. Congress. Congressional Budget Office. 2006. *Trends Income of Unemployment Insurance Recipients*. Washington, DC: Government Printing Office, March.

U.S. Department of Labor. 2006a. Comparison of state unemployment insurance laws, 2006. Employment and Training Administration. http://workforcesecurity.doleta.gov/unemploy/uilawcompar/2006/comparison2006.asp (accessed July 28, 2006).

U.S. Department of Labor. 2006b. Significant provisions of state unemployment insurance laws. Employment and Training Administration, Office of Workforce Security (July). http://workforcesecurity.doleta.gov/unemploy/naspro2006.asp.

U.S. Department of Labor. 2006c. Unemployment insurance chartbook. Employment and Training Administration. www.ows.doleta.gov/unemploy/chartbook.asp.

U.S. Department of Labor. Various years. Employment and Training Administration. *Financial Handbook*. Washington, DC: Government Printing Office.

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Chairman MILLER. Thank you, Mr. Rosen.

Ms. Moore.

STATEMENT OF MS. JEANIE MOORE, VICE PRESIDENT, CONTINUING EDUCATION PROGRAMS, ROWAN-CABARRUS COMMUNITY COLLEGE, SALISBURY, NORTH CAROLINA

Ms. MOORE. Yes. Congressman Miller and Committee, thank you very much for inviting me here today to share the story of our community in Kannapolis, North Carolina.

Kannapolis, North Carolina, was the home of Pillowtex Corporation, formerly Fieldcrest Cannon and Cannon Mills, which was the renowned manufacturer of Cannon towels and sheets. The 116-year-old textile operation occupied over nine million square feet of space in downtown, in the heart of the Kannapolis community. In 2003, the company was plagued with periodic layoffs, bankruptcy rumors, and an uncertain future. Over 4,000 of our area residents were employed by the textile giant.

This company closed in July of 2003. We were faced at the community college with dealing with a very unique workforce. Forty-six percent did not have a high school credential, and the average age was 46. There were multi-generational job losses within families. They had limited transportation, they were psychologically and physically immobile, and the social and economic structure of their community had been completely dismantled. As of September of 2003, 42.5 percent were behind in their rent or house and mortgage payments, and 10.6 percent had already gotten foreclosure notices. Approximately 93 percent had no ability to afford to get health insurance.

Our local community college had multiple challenges in dealing with this population. We did receive a national emergency grant from the Department of Labor. It was the first of its kind directly given to community colleges. The administrative process for that grant was not well defined, which caused us some angst.

Enrollment increases for community colleges in North Carolina do not generate additional funding until the year after the enrollment occurs. So having an influx of workers posed some particular economic challenges for us, even with the NEG [National Emergency Grant] award. There were no funds typically available for

new programs and development. These efforts generally are absorbed in our annual operating budget.

The Pillowtex enrollment demand occurred during a time when the college was already experiencing significant additional growth, simultaneous with our fall registration. Capacity building efforts in terms of both facilities and human resources require additional time, energy, and dollars that were not well-conceived at that time.

However, at the end of the project through our fall semester of 2007, I am happy to report these results. The college provided direct services to 92 percent of all eligible clients in the service area; 52 percent of the eligible population enrolled in programs. Among the clients the college achieved a 95 percent satisfaction level for its services. We did see increased enrollment in trade and technical programs which were previously under-enrolled. We did as a college create a comprehensive accountability plan, which allowed us to track clients and the services that were provided to them. We awarded over 447 curriculum certificates, diplomas, and degrees, 460 continuing education certificates, 259 GEDs.

There were multiple lessons that were learned through this process. First and foremost, sound decisions regarding training were difficult to make because there was an absence of jobs. Decisions were made about training during times of great stress; basic life needs of housing, substance, and health insurance were a priority for the clients. Many enrolled simply to extend unemployment benefits. Compressed periods of study during a summer term did not work well with this population. Having students enroll in remedial classes simultaneous with course of study limits opportunity for success.

Displaced workers lacked access and familiarity with technology. Many had a significant lack of job-seeking skills. Their wage expectations were unrealistic based on the skills that they had and the jobs that were available. The college adopted an attitude of save those who you can, because not everyone could be saved during this process. This was the first award directly to our college. I spoke earlier about administrative challenges. Our marketing materials were geared to young college students, not to adults, and many did not see that they fit into our scheme of practice.

Of course, the TRA [Trade Readjustment Allowances] and legislation partners were concerned. There were lessons there. The TRA did not support programs of study leading to self-employment, even though the local economy offered job opportunities in those areas such as real estate, cosmetology. Legislation restrictions regarding students enrolled in basic skills and English as a second language, there was a 52-week limit. That was not often enough time for students to progress to the levels that they needed to have sustainable skills for a new job.

Advising was difficult because the trade legislation was being rewritten simultaneous with the event, and we had lots of second guesses as to what we were to do or not to do. The Employment Security Commission definition of employment of $1,000 within one quarter does not equal sustainable wages and benefits, and there was a mechanism needed for sharing confidential information among our National Emergency Grant partners.

We move forward to 2008, with what is happening in Kannapolis. Kannapolis is now the home of the developing North Carolina Research Campus (NCRC). The city witnessed the demolition of the former Pillowtex site simultaneously with the construction of majestic, state-of-the-art research laboratories and facilities. Within two years the campus anticipates that there will be over 2,000 research scientists and technicians employed in these early buildings. By 2032, the region is expected to realize over 37,450 jobs related to this project.

The project is the dream of Mr. David H. Murdock, the former owner of Fieldcrest Cannon, who is also owner of Dole Foods Company. Mr. Murdock has a long-standing commitment to health and welfare of people around the world. After realizing the great potential of biotechnology to cure disease and improve health, he dedicated more than $1 billion of his personal funds to developing this campus. His vision is to create a world-class research hub where collaborative science will lead the charge for great discoveries in nutrition, health, and biotechnology research. The discovery and innovation performed at the NCRC will have a lasting effect on the way that the country and the world lives.

This NCRC project is a product of serendipity for the Kannapolis community. Not everyone has a private benefactor with the means of Mr. Murdock to come in and invest. It is a product of extraordinary vision, a unique public-private partnership with Mr. Murdock, the State of North Carolina, the North Carolina University System, the North Carolina Community College System, and local government. It is a commitment to collaboration and innovation by the economic development community, local and regional workforce partners, and educational providers K through 16. There is a requirement in this project to embrace change, diversity, and change the culture, and there is a recognition that the old economy is no longer sustainable.

The characteristics of the project are designed around the principles of math, science, research, discover, and innovation, their state-of-the-art facilities and equipment; a community that provides infrastructure and amenities to support the concept of live, work, and play; collaboration among multiple constituencies; focus on health, wellness, and nutrition; an emphasis on embracing change and diversity; creating a knowledge-based economy, globalization of business; and entrepreneurship and creativity.

North Carolina has strengths in terms of economic recovery with a positive history of collaboration and partnership among its Job Link providers; the attractive quality of life; an excellent geographic location; business friendly; a best-funded, best-organized community college system, not necessarily well-funded or well-organized; unique funding through our new and expanding industry training, focused industry training and customized industry training that allows us to support pre-employment and skill development and customized training for job creation and development in the manufacturing sectors. The North Carolina Biotechnology Center, the North Carolina BioNetwork, National Center for Biotechnology Workforce Training, emerging partnerships, collaborations with universities. A commitment to education and skill development, innovation and customization in education and training, a

support of entrepreneurship and small business growth, the ability to leverage resources and build partnerships among workforce and economic development practitioners. We have an increasing number of early college programs throughout the state, and we recognize that recovery from mass job losses is not immediate. There is no quick fix.

Our current state of the region, we have continued challenges of job loss and job layoffs. We have continued unemployment and underemployment, basic survival needs of housing, utilities, food, and transportation supersede participation in education. We have worker shortages in health care, advanced technologies, and technical occupations, and we are continuing efforts to try to bridge local workers to jobs of the future. We have engaged in constant strategies to build capacity for advanced technology in the region through partnerships, collaboration, and articulation of programs.

While the NCRC has not yet produced jobs for the majority of dislocated workers from Pillowtex, we recognize that this economic recovery will be a long-term process, and we are looking forward to the future.

[The prepared statement of Ms. Moore follows:]

PREPARED STATEMENT OF JEANIE MOORE

The Rebirth of Kannapolis

Abstract

North Carolina has suffered significant job losses in textile, furniture and tobacco manufacturing. In 2003, the state recorded the largest single lay-off in its history when textile giant Pillowtex Corporation (formerly Fieldcrest-Cannon) closed its doors, effectively displacing 4,790 workers statewide. Through the U.S. Department of Labor, local and State employment security commission agencies and Job Link Career Centers received $24.5 million in National Emergency Grant (NEG) funding to address the needs of this displaced population. An additional $2.5 million was awarded to the state's community college system to build capacity to meet educational and training demands. Rowan-Cabarrus Community College (RCCC) experienced the largest influx of students, exceeding expectations by enrolling 52 percent of the affected clients in programs of study. Consequently, the college was recognized for its success with the 2005 Workforce Innovation Award for serving special population in the workplace from the U.S. Department of Labor. Although the NEG expired in December 2005, the local community of Kannapolis (original site of Pillowtex) is in the midst of an amazing transformation with the evolution of the North Carolina Research Campus (NCRC), the legacy project of David H. Murdock, CEO of Dole Foods. This public/private development is anticipated to create in excess of 2,000 biotechnology research jobs beginning in 2008 and a total of 37,000 research-related and ancillary jobs for the Charlotte Region by 2032.

Kannapolis 2003

Pillowtex

Kannapolis was the home of Pillowtex Corporation (formerly Fieldcrest Cannon and Cannon Mills), renowned manufacturer of Cannon towels and sheets. The 116-year-old textile operation occupied over nine million square feet of real estate in the heart of downtown Kannapolis. In 2003, the company was plagued with periodic layoffs, bankruptcy rumors, and an uncertain future. Over 4,000 area residents were employed by the textile giant.

Unique Nature of the Workforce

- 46 percent without a high school credential
- Average age 46

- Multi-generational job losses within families
- Limited transportation
- Psychologically and physically immobile
- Social and economic structure of the community in Kannapolis dismantled
- Approximately 500 workers non-English speaking (Hispanic and Southeast Asian)
- As of September 2003, 42.5 percent behind in rent or house mortgage payments.
    - 10.6 percent received foreclosure/eviction notices.
- 92.7 percent indicated they cannot get or afford health insurance.

*Taken from data provided by N.C. Department of Commerce and a Long-term Needs Assessment Report conducted by Research and Training Specialist, Inc. (RTS), September 2003.

Local Community College Challenges

- NEG award was first of its kind directly given to community college (Administrative process was not well-defined)
- Enrollment increases do not generate additional funding until the year after the enrollment occurs
- No funds are available for new program development; these efforts must be absorbed in annual operating budget
- Pillowtex enrollment demand occurred during time when college was already experiencing significant additional growth simultaneous with fall registration
- Capacity building efforts in terms of both facilities and human resources require additional time, energy, and dollars

RCCC Outcomes through Fall Semester 2007

- Provided direct service to 92 percent of eligible clients
- 52 percent of eligible population enrolled
- 95 percent satisfaction level among NEG eligible clients
- Increased enrollment in trade and technical programs
- Created a comprehensive accountability plan with computerized client database and tracking system
- 447 Curriculum certificates, diplomas, degrees awarded
- 460 Continuing Education certificates awarded
- 259 GEDs awarded

Lessons Learned

Concerning clients

- Sound decisions regarding training difficult due to the absence of jobs
- Decisions were made during times of stress; basic life needs of housing, sustenance, and health insurance were priority
- Many enrolled in courses simply to extend unemployment benefits
- Compressed periods of study such as summer term did not work well with this population
- Enrollment in remedial classes simultaneous with course of study limited the opportunity for success
- Displaced workers lacked access and familiarity with technology
- Lack of job seeking skills
- Wage expectations were unrealistic based on skills

Concerning the College

- Adapt attitude—save those you can
- First NEG award directly to community colleges—administrative challenges
- No marketing/orientation materials geared to the needs of this population

- Faculty and staff were not trained on how to deal with the emotional stress of displaced workers

Concerning the Trade Legislation/Partners

- TRA did not support programs of study leading to self-employment even though local economy offered job opportunities (ex., Real Estate/Cosmetology)
- Trade legislation restrictions regarding students enrolled in Basic Skills and ESL—52 week limit
- Advising difficult as Trade legislation being re-written simultaneous with event
- ESC definition of employment ($1,000 within one quarter) does not equal sustainable wages and benefits
- Mechanism needed for sharing confidential information among NEG partners

Kannapolis 2008

North Carolina Research Campus Project

Kannapolis is now the home of the developing North Carolina Research Campus (NCRC). The city witnessed the demolition of the former Pillowtex site simultaneously with the construction of majestic state-of-the art research laboratories and facilities. Within two years, the campus anticipates that there will be over 2,000 research scientists and technicians employed in these early buildings. By 2032, the region is expected to realize over 37,450 jobs related to the NCRC project. (Source: Market Street Report)

Mr. David H. Murdock, former owner of Fieldcrest Cannon, is the visionary behind NCRC. As owner of Dole Foods Company, Inc., Mr. Murdock has a long-standing commitment to the health and welfare of people around the world. After realizing the great potential of biotechnology to cure disease and improve health, he dedicated more than one billion dollars of his personal funds to developing the NCRC. His vision for NCRC is to create a world class research hub where collaborative science will lead the charge for great discoveries in nutrition, health and biotechnology research. The discovery and innovation performed at the NCRC will have a lasting effect on the way that the country, and the world, lives.

"The Research Campus will be a thriving scientific community where the best minds will shape the way we understand nutrition and ifs relationship to disease."—David H. Murdock, NC Research Campus Founder and Visionary

The NCRC is the product of:

- Serendipity (Private benefactor David H. Murdock)
- Extraordinary vision
- Unique public/private partnership with David Murdock, State of North Carolina, NC University System, NC Community College System, and local government
- Commitment to collaboration and innovation by economic development community, local and regional workforce partners, educational providers K–16
- Requirement to embrace change, diversity and change culture
- Recognition that "old economy" is no longer sustainable

Characteristics of the NCRC Project

- Designed around the principles of math, science, research, discovery, and innovation
- State-of-the-art facilities and equipment
- Community that provides infrastructure and amenities to support the concept of "live, work, and play"
- Collaboration among multiple constituencies
- Focus on health, wellness, and nutrition
- Emphasis on embracing change and diversity
- Creation of knowledge-based economy
- Globalization of business
- Entrepreneurship and creativity

North Carolina Strengths

- Positive history of collaboration and partnership of Job Link Career Centers and NC Community Colleges
- Attractive quality of life
- Excellent geographic location—access to transportation
- Business friendly
- "Best funded, best organized" community college system in the country (not necessarily well-funded or well-organized)
- Unique funding through New and Expanding Industry Training, Focused Industry Training, and Customized Industry Training provides venues to support pre-employment training and skill development, as well as customized training for job creation and development in manufacturing sectors
- North Carolina Biotechnology Center
- North Carolina BioNetwork—specialized initiative within NC Community College System designed to establish a competitive advantage for the state in recruiting biotechnology industry
- National Center for Biotechnology Workforce Training (Forsyth Technical Community College)
- Emerging partnerships, collaborations with universities
- Commitment to education and skill development
- Innovation and customization in education and training
- Support of entrepreneurship and small business growth
- Ability to leverage resources and build partnerships among workforce and economic development practitioners
- Increasing numbers of successful Early College programs throughout the state
- Recognition that recovery from mass job losses is not immediate—"There is no quick fix"

Current State of the Region

- Continued challenge of job loss and layoffs
- Continued unemployment and underemployment
- Basic survival needs of housing, utilities, food, and transportation supersede participation in education
- Worker shortages in health care, advanced technologies, and technical occupations
- Continued efforts to "bridge" local workers to jobs of the future
- Constant strategies to build capacity for ,advanced technology in the region through partnerships, collaboration, articulation of programs

Bibliography

N.C. Department of Commerce, Division of Employment and Training. *Pillowtex Employee Survey.* August 2003.

Research and Training Specialist, Inc. *A Long-term Needs Assessment Report.* September 2003.

Market Street Services, Inc. and Economic Impact Group, LLC. *ESTIMATING THE ECONOMIC IMPACT OF THE NORTH CAROLINA RESEARCH CAMPUS.* October 16, 2006. *<http://www.ci.kannapolis.nc.us/NCRC_16.asp>*

Market Street Services, Inc. *SWOT ANALYSIS: Preparation for the North Carolina Research Campus.* October 16, 2006. *<http://www.ci.kannapolis.nc.us/NCRC_16.asp>*

Economic Recovery Timeline.

April 2003

- Rapid Response meeting with Department of Commerce
- No definite information regarding magnitude of Pillowtex decision
- No foreseeable jobs on the horizon

June 17, 2003
Governor's Task Force

- Participants included NC Dept. of Commerce, NC Dept. of Labor, the NC Community College System, NC Governor's office, the NC Employment Security System, Cabarrus County and Kannapolis City government officials, and Rowan-Cabarrus Community College (RCCC).
- The purpose of the task force was to bring all interested parties together to begin developing a strategy for mass layoffs.
- The task force was "planning for the worst, hoping for the best." At best, Pillowtex would announce a limited number of layoffs. At worse, the company would shut its doors.

July 30, 2003

- Pillowtex Corporation closed
- Displaced 7,650 employees company wide
- 4,790 in North Carolina
- 4,340 plant workers in Cabarrus and Rowan Counties
- Number of residents in RCCC service area—3,990
- Largest single layoff in the southeast United States

August 4, 2003

Rapid Response meetings commence at Pillowtex Plant 4

August 14, 2003

Job Link Resource Center opened at Plant 4 (Rowan and Cabarrus Job Link Career Centers, Rowan-Cabarrus Community College)

August 15, 2003

$20.6 million National Emergency Grant awarded to assist Pillowtex workers

August 20, 2003

RCCC Fall Semester began (record 20 percent enrollment growth)

December 2004

David Murdock purchases Kannapolis Pillowtex properties in U.S. Bankruptcy Court

July 2005

RCCC receives Workforce Innovations Award from US Department of Labor for "Serving Special Populations in the Workplace"

November 2005

Groundbreaking ceremony for Core laboratory facility of North Carolina Research Campus

December 2005

Pillowtex training project officially ended

January 2007

R^3 Center opens on perimeter of North Carolina Research Campus. To date, over 2,100 clients have been served

September 24, 2007

M.U.R.D.O.C.K. Study (Measurement to Understand Reclassification of Disease of Cabarrus and Kannapolis) announcement

August 2008

Opening of Core Laboratory facility of North Carolina Research Campus

Opening of Rowan County Early College

Fall 2008

Opening of N.C. State University and University of North Carolina buildings at the North Carolina Research Campus

August 2009

North Carolina Research Campus Early College opening

Best industry Practices in Rapid Response
Example: Philip Morris USA

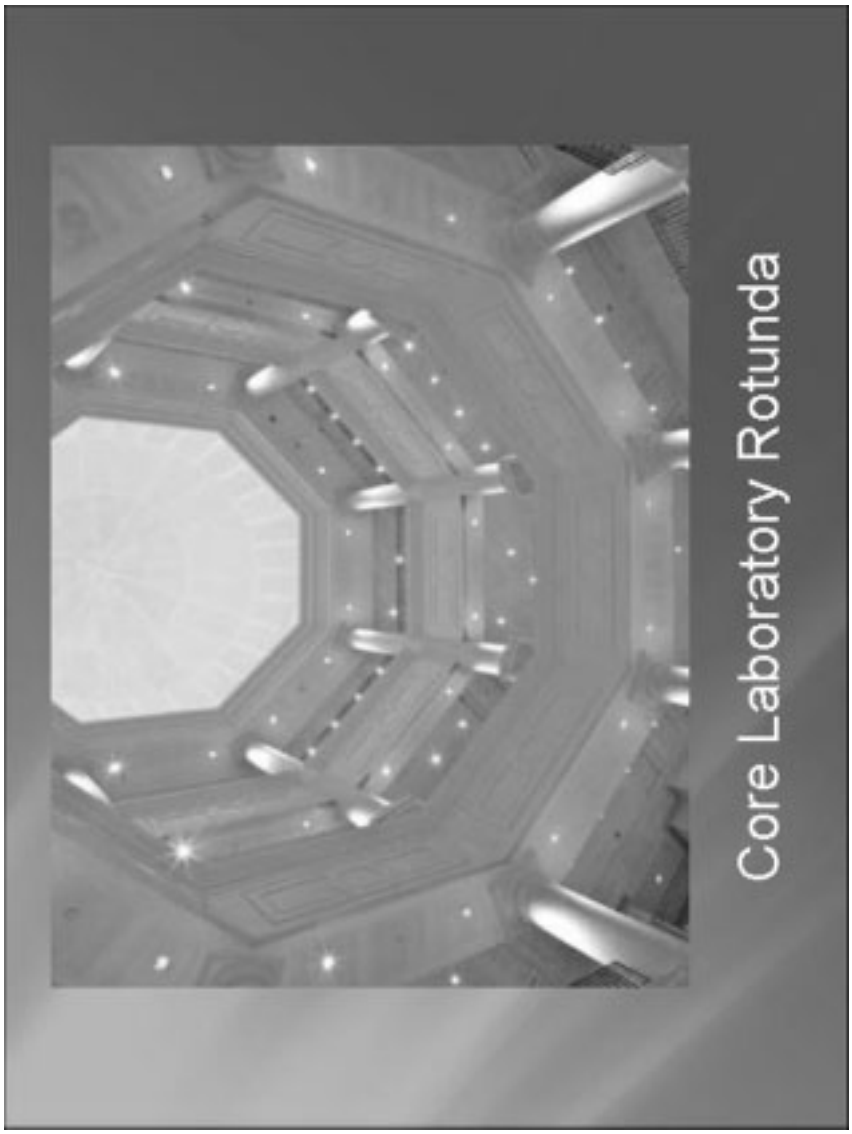
- History of sound hiring practices to accumulate an educated and technically competent workforce
- Advance notice to employees and community regarding relocation decision (three years)
- Carefully constructed business plan to review relocation impact on employees, primary stakeholders, and community
- Transparent process of communication regarding company's timeline and activities related to relocation
- Availability of severance options and relocation assistance
- Commitment to skill development and education through tuition reimbursement and "in-house" Employee Development Center (both pre- and post-relocation announcement)
- Continuous engagement in local, regional, and State economic and workforce development initiatives
- Well-established endowed scholarship fund available to provide on-going support for community college scholarship awards
- Strategic grant contributions to stakeholders that enhance and create opportunities to build capacity for workforce development within the region

Philip Morris USA plans to close its Cabarrus County, NC plant by 2010. The company has implemented the Best Practices described above in its relocation strategy.

This information is offered in contrast to the scenario that occurred when Pillowtex Corporation closed in 2003.


PLANT 1
KANNAPOLIS, NC

David H. Murdock Core Laboratory


Core Laboratory Rotunda

Laboratory Area


Laboratory Area


Laboratory Area


Laboratory Area

NC Research Campus Energy Plant

NC Research Campus Energy Plant

BIOGRAPHY FOR JEANIE MOORE

Mrs. Moore earned her Bachelor's Degree in Special Education from Greensboro College; her Master's Degree in Adult Education from Appalachian State University; and has completed additional studies at UNC–Greensboro. She has been employed at college since 1977, and is a native of Rowan County.

Currently, Jeanie oversees the continuing education programs of Rowan-Cabarrus Community College (RCCC) that range from basic skills (literacy) to customized training programs in Focused Industry Training and New & Expanding Industry. In addition to her Continuing Education responsibilities; she is the liaison for the college for the North Carolina Research Campus project and oversees the R^3 Career Center. She has been a member of the Senior Leadership Team since 1996, participating in strategic planning, budgeting, facilities planning and design, and program development.

Jeanie is a former member of the North Carolina Community College Economic Workforce Development Leadership Committee and was President of the NC Community College Adult Educators' Association from 1999 to 2000. She served as Co-Director of the NC Community College Leadership Program from 1990–1992.

Community and state-wide involvement includes; Salisbury-Rowan Economic Development Board (current Chair); Centralina Council of Governments Economic Development Board; NC BioNetwork BioBusiness Advisory Committee; Advisory Committee for Biotechnology in the Charlotte Region (North Carolina Biotechnology Center); Charlotte Regional Workforce Development Partnership; N.C. Community College Adult Educators' Association; numerous Chamber of Commerce committees in both Rowan and Cabarrus counties.

Jeanie has presented at a variety of State and national conferences covering topics such as Leadership, Continuing Education Supervision, Rapid Response to Dislocated Workers, and Biotechnology. In July 2005, Jeanie traveled to Philadelphia to receive the United States Department of Labor Workforce Innovations Award for "Serving Special Populations in the Workplace" for the Pillowtex Project.

Chairman MILLER. Thank you, Ms. Moore.

Dr. Palley.

STATEMENT OF DR. THOMAS I. PALLEY, FOUNDER, ECONOMICS FOR DEMOCRATIC AND OPEN SOCIETIES PROJECT, WASHINGTON, D.C.

Dr. PALLEY. Chairman Miller, Members of the Committee, thank you for the opportunity to contribute to this hearing. My name is Thomas Palley, and I am an economist. One of the subjects I have studied extensively is globalization and its impact on the American economy.

Globalization has already caused significant job loss, particularly in the manufacturing sector. Since manufacturing is key for productivity growth and for producing goods to exchange with other countries, these losses put our future prosperity at risk. As globalization deepens, future job dislocations will affect a far wider swath of the economy.

However, job dislocation is just part of the story. In my view, a greater danger is that globalization threatens to permanently dissolve the social contract that has historically supported shared prosperity. Thus, globalization has already contributed to wage stagnation and rising income inequality, and that looks set to continue.

So far the macro-economic consequences of rising inequality have been muted by rising debt and asset price bubbles that have compensated to sustain consumer demand. However, there are indications that many households have reached their borrowing limits, which augurs lower future growth.

These observations illustrate the depth of the challenge posed by globalization. How our government responds will significantly im-

pact the future opportunities of American families to participate in the American dream. That makes an understanding of globalization critical, as we are unlikely to design the right policies without it.

The past 25 years have seen a stunning increase in global economic integration that shows every indication of deepening. For some, globalization is equivalent to trade, and outsourcing is merely an extension of trade as we know it. For this group, outsourcing promises significant future gains without any long-term costs for society as a whole, although individuals may be economically injured.

An alternative view that I subscribe to is that globalization is a qualitatively new phenomenon, with outsourcing being its latest evolution. Globalization and outsourcing could not proceed without trade, but globalization is far more than trade, and that more than anything else is the message that I would like to communicate to the Committee today.

That we have treated globalization as if it was trade explains why our policies have come up short. Classical free trade theory, which has driven U.S. integration into the global economy, claims all can benefit when countries specialize in producing those things in which they have comparative advantage. For this to hold, the means of production, that is capital and technology, must be internationally immobile, stuck in each country. That is what globalization has undone.

Jack Welch, the former CEO of General Electric, captured the new reality when he talked of ideally having, "every plant you own on a barge." He envisioned factories floating between countries to take advantage of lowest costs, be they due to undervalued exchange rates, low taxes, subsidies, or cheap labor. Globalization has made Welch's barge a reality, creating a new world of what I call "barge economics," in which the engine of trade is capital mobility rather than comparative advantage.

In this new world, so-called free trade increasingly trades jobs and promotes downward equalization of wages and standards by fundamentally changing the balance of bargaining power between workers and corporations and also by changing the margins of competition between countries.

Think of two swimming pools, with the U.S. being represented by the pool with the higher water level. Barge economics joins the two pools together, causing the water to equalize at a lower level. The U.S. response to barge economics has been competitiveness policy, which advocates methods such as increased education spending to improve skills, lower corporate tax rates, and investment in R&D incentives. The thinking is increased competitiveness can make the U.S. more attractive to business. But such steps cannot anchor the barge.

For instance, government can subsidize R&D spending, but the resulting innovations may simply end up in new offshore factories. Moreover, competitiveness policy can be counterproductive because it easily degenerates into a race to the bottom. For instance, if the U.S. cuts corporation taxes, other countries may match to stay competitive. The result is no gain for the U.S., while profit taxes are

lowered and tax burdens shifted onto wages, which widens income inequality.

Not only does barge economics undermine earlier policy tools, it also creates completely new challenges that reveal just how different globalization is from the old world of free trade theory. Barge economics incentivizes countries to adopt unfair policies to increase their relative business attractiveness. These policies include disregard of environmental damage, suppression of labor to keep wages low, direct subsidies, and undervalued exchange rates. All are visible in China, the poster child for such abuses.

Another challenge is the creation of a corporation versus country divide. When corporations were nationally based, profit maximization by business contributed to national economic success by insuring efficient resources. Today corporations still maximize profits, but they do so from the standpoint of their global operations. That is good for corporations, but may not be good for countries.

What does this mean for policy? First, we need to continue with the collection of policies known as competitiveness policy. That means investing in public infrastructure and education and encouraging R&D spending.

Second, we need to continue with traditional trade enforcement policies that must be vigorously enforced, and we need to expand and strengthen policies like Trade Adjustment Assistance. But it is absolutely critical that we recognize that these older policies are not enough. Put bluntly, barge economics undermines the effectiveness of competitiveness policy, while increased assistance to displaced workers treats the symptoms, but not the cause. Barge economics increases temptations for unfair policy and creates a wedge between corporate and national interests.

These are the challenges that must be addressed, and if they cannot be addressed, the future of the American dream looks grim. Preventing unfair competition calls for global rules, which is where exchange rate rules and robust labor and environmental standards enter. Corporations know that a global economy needs global rules, which is why they have worked so hard to create global property rights. However, they have consistently opposed global rules that help workers and advance social concerns.

Closing the wedge between corporation and country calls for such measures as ending preferential tax treatment of profits earned offshore, making it illegal for corporations to reincorporate outside the U.S. to escape U.S. tax laws, and new tax arrangements that encourage jobs and value creation within the U.S. Under current arrangements VAT taxes are refunded on exports. Other countries have VAT systems, while the U.S. does not, which disadvantages the U.S. Either the U.S. should adopt a VAT or VAT rebates should be abolished.

Finally, we must reconsider how we finance Social Security and health insurance. These vital arrangements are financed through payroll taxes and wage benefits. Increasing job costs and thereby encouraging firms to shift jobs offshore, that suggests detaching these costs from employment.

The New Deal can provide an intellectual inspiration to meet this challenge. During that earlier period we completed the integration of our national economy, creating national economic regula-

tions and governance that prevented unfair competition between regions.

For instance, Congress explicitly recognized the danger of unfair competition, which is why we have a national minimum wage. That strategy worked and created the basis for 50 years of prosperity. Now we face an analog challenge, this time to create new economic arrangements that can provide a similar basis for prosperity in a globalized economy. One certainty is that our existing trade policy frame is not up to this task.

Thank you, and I will be glad to answer questions that the Committee may have.

[The prepared statement of Dr. Palley follows:]

PREPARED STATEMENT OF THOMAS I. PALLEY

BARGE ECONOMICS: THE NEW ECONOMICS OF GLOBALIZATION

Chairman Miller, Ranking Member Sensenbrenner, Members of the Committee, thank you for the opportunity to contribute to this hearing.

My name is Thomas Palley and I am an economist. One of the subjects I have studied extensively is globalization and its impact on the American economy. This subject is at the heart of the issues you are considering today as globalization threatens to permanently dissolve the social contract that has historically supported shared prosperity.

How our government responds to globalization will significantly impact the future opportunities of American workers and their families to participate in the American dream. Designing an appropriate policy response requires understanding globalization. That can appear a frustrating academic exercise, but it is critical as we are unlikely to adopt the right policies without understanding.

I. Globalization is more than trade

The past twenty-five years have witnessed a stunning increase in the degree of U.S. integration into the global economy, and there is every indication this integration will deepen as globalization impacts previously untouched sectors.

For some, globalization is equivalent to trade, and outsourcing is merely an extension of trade—a further application of the principle of comparative advantage. For this group, outsourcing promises significant future gains without any long-term costs for society as a whole, although individuals may be economically injured.

An alternative view that I subscribe to is that globalization is a qualitatively new phenomenon, with outsourcing being the latest evolution. Trade is a central part of globalization, and globalization and outsourcing could not proceed without trade. However, globalization is far more than trade. The problem is we have treated globalization as if it was trade, which explains why our policies have come up short.

II. Barge economics: the new economics of globalization

U.S. international economic policy has long been guided by the theory of comparative advantage that recommends free trade. In combination with tremendous technical innovations that have lowered transportation and communication costs, that policy has spurred U.S. integration into the global economy.

Yet paradoxically, global integration has undermined the relevance of comparative advantage theory and left the U.S. economically vulnerable. This is because our policy approach remains stuck in the past and based on an obsolete view of the world.

Classical free trade theory claims that all can benefit when countries specialize in producing those things in which they have comparative advantage. The necessary requirement is that the means of production (capital and technology) are internationally immobile and stuck in each country. That is what globalization has undone.

Several years ago Jack Welch, former CEO of General Electric, captured the new reality when he talked of ideally having "every plant you own on a barge." His economic logic was that factories should float between countries to take advantage of lowest costs, be they due to under-valued exchange rates, low taxes, subsidies, or a surfeit of cheap labor.

Globalization has made Welch's barge a reality, creating a new world of "barge economics." This new world is marked by global corporations that participate in flexible production and sourcing networks that are the global economy's shipping lanes.

In this new world, capital mobility rather than comparative advantage has become the engine of trade. And with this change, so-called "free trade" increasingly trades jobs and promotes downward equalization of wages and standards.

This is because barge economics fundamentally changes the structure of competition, changing the balance of bargaining power between workers and corporations, and changing the margins of competition between countries.

Think of two swimming pools, with the U.S. being represented by the pool with a higher water level. Barge economics joins the pools together, causing the water to equalize at a lower level.

Outsourcing is an evolution of barge economics that amplifies the problem. Previously, companies could shift production to different countries, but they owned the facilities and workers were in competition with just one country. Now, companies can use global sourcing techniques that put contracts out for bid, thereby placing workers in permanent competition with workers everywhere.

Wal-Mart pioneered this strategy. It owns no production facilities, and when wages start to rise in a country it can shift its buying to another cheaper country. Moreover, rather than creating competition in one product, its "big box" stores create global competition for almost everything it sells. That places large swathes of workers in global competition.

III. Old Style competitiveness policies are not enough

The U.S. response to barge economics has been competitiveness policy that advocates measures such as increased education spending to improve skills; lower corporate tax rates; and investment and R&D incentives. The thinking is increased competitiveness can make the U.S. more attractive to businesses.

The problem is competitiveness policy is not up to the task of anchoring the barge. For instance, government can subsidize R&D spending, but the resulting innovations may simply end up in new offshore factories.

Moreover, competitiveness policy can be counter-productive because it easily degenerates into a race to the bottom. For instance, if the U.S. cuts corporation taxes, other countries may match to stay competitive. The result is no gain for the U.S., while profit taxes are lowered and tax burdens shifted on to wages, which widens income inequality.

IV. Barge economics creates new policy challenges

Not only does barge economics undermine earlier policy tools, it also creates completely new challenges that reveal how different globalization is from the old world of free trade theory.

Thus, barge economics further incentivizes countries to adopt unfair policies to increase their relative business attractiveness. These policies include disregard of environmental damage; suppression of labor to keep wages low; direct subsidies; and under-valued exchange rates. All are visible in China, which is the poster-child for such abuses.

Another new challenge is the creation of a "corporation versus country" divide. Previously, when corporations were nationally based, profit maximization by business contributed to national economic success by ensuring efficient resource use. Today, corporations still maximize profits, but they do so from the standpoint of their global operations. That is good for corporations, but it may not be good for countries.

When companies raise profits by rearranging production according to global cost patterns, those shifts can lower country income. For instance, when Boeing transfers production to China, the U.S. loses high value adding jobs and national income can fall. Moreover, though Boeing makes larger short-run profits on its Chinese production, even it may lose in the long run if it inadvertently creates a rival Chinese aircraft producer.

From an American worker perspective, the global economy has always had abundant supplies of cheap labor. In the past American workers were still able to compete and benefit from trade. The critical difference today is American corporations are taking their capital and technology offshore and equipping low-wage foreign workers. Those investments undermine American workers because that foreign production is often either intended for the U.S. market or competes with U.S. production.

V. The costs of globalization and outsourcing

Much attention has focused on job losses which have been significantly concentrated in manufacturing. These losses become very large if measured in terms of "lost job opportunities"—that is in terms of the manufacturing jobs implicitly embodied in the trade deficit. Since manufacturing is key for productivity growth and for producing goods to exchange with other countries, these losses put our future prosperity at risk.

Looking ahead, many more sectors will be subject to job losses as the competitive threat from off-shore outsourcing matures.

More importantly, job loss is not an adequate metric for measuring the impact of globalization and outsourcing on workers. Even if no jobs are lost, outsourcing can still have significant effects on wage levels by impacting workers' sense of employment security and bargaining power. Jobs do not have to move for globalization to have big effects. All that is needed is that the threat to move be credible.

Clearly, globalization is not responsible for all the wage stagnation, rising income inequality, and rising job insecurity. However, there is now widespread recognition that its affect on income inequality and insecurity has been negative. Moreover, because globalization creates the economic threat of exit, it can discourage implementing policies that would ameliorate inequality even if due to other forces. That is a problem which is likely to grow.

So far, the macro-economic consequences of rising inequality have been muted by rising debt and asset price bubbles that have compensated to sustain consumer demand. However, there are indications that many households have reached their borrowing limits, which augurs lower future growth.

Finally, our engagement with globalization has been implemented without regard to the trade deficit and its macro-economic impact. As a result we are now paying a huge price in the form of the housing slump and the likelihood of a prolonged period of recession and slow growth. This is because the large trade deficits of recent years distorted the economic expansion by undermining investment and manufacturing, and that prompted the Federal Reserve to foster a compensating housing boom, which has now ended in a dangerous and costly bust.

VI. Policy implications of different economic perspectives

What does this mean for policy?

First, we need to continue with the collection of policies that have been known as competitiveness policy. That means investing in public infrastructure, investing in education, and encouraging R&D spending.

Second, we also need to continue with traditional trade enforcement policies that must be enforced vigorously, and we should expand and strengthen policies like trade adjustment assistance.

However, the critical implication is that we must recognize that these older policies are not enough. Therein is the split between those who interpret "globalization as trade" versus those who interpret "globalization as barge economics."

Put bluntly, barge economics undermines the effectiveness of competitiveness policy, while increased assistance to displaced workers treats the symptom but not the cause.

Barge economics increases temptations for unfair policy, and creates a wedge between corporate and national interests. These are the challenges that must be addressed, and if they cannot be addressed the future of the American dream looks grim.

Preventing unfair competition calls for global rules against unfair competition, which is where exchange rate rules and robust labor and environment standards enter. Corporations know that a global economy needs global rules, which is why they have worked so hard to create global property rights. However, they have consistently opposed global rules that help workers and advance social concerns.

Countries must be prevented from systematic policies of export-led growth whereby they grow by relying on demand in other countries rather than building their own domestic markets. Instead of export-led growth we need internationally coordinated economic policies as a global economy needs internationally consistent economic policies.

Closing the wedge between corporation and country calls for such measures as ending preferential tax treatment of profits earned offshore; making it illegal for corporations to reincorporate outside the U.S. to escape U.S. tax laws; and new tax arrangements that encourage jobs and value creation within the U.S.

Finally, we must reconsider how we finance our government, social security, and health insurance. Under current arrangements VAT taxes are refunded on exports.

Other countries have VAT systems, while the U.S. does not, which disadvantages the U.S. Either the U.S. should adopt a VAT or VAT rebates should be abolished.

With regard to social security and health insurance, these vital arrangements are financed through payroll taxes and wage benefits. Such financing increases job costs, which encourages firms to shift jobs offshore. That suggests shifting to other forms of financing that detach these costs from employment.

VII. The New Deal as inspiration

The New Deal can provide intellectual inspiration to meet this challenge. In many regards the New Deal witnessed the completion of the process of creating an integrated national economy. During that period we created national economic regulations and governance that prevented unfair competition between regions. Congress explicitly recognized the danger of unfair competition, which is why we have a national minimum wage. Financial market regulation was also applied nationally. That strategy worked and created the basis for fifty years of prosperity.

Now we face an analog challenge, this time to create economic arrangements that can support shared prosperity in a globalized economy. The intellectual and political challenge is formidable, as were the challenges of the New Deal era.

There are many things we can do alone, and we will also need to work co-operatively with other countries. Additionally, if other countries will not join us, we must have in place measures that can protect us. One certainty is that our existing trade policy frame is not up to the task because globalization is far more than trade.

In closing I request that the Chairman admit into the record as part of my testimony a report attached to this written statement titled "The Economics of Outsourcing: How Should Policy Respond?"

Thank you. I will be glad to answer any questions the Committee Members may have regarding my testimony.

The Economics of Outsourcing: How Should Policy Respond?

Abstract

Outsourcing is a central element of economic globalization, representing a new form of competition. Responding to outsourcing calls for policies that enhance national competitiveness and establish rules ensuring acceptable forms of competition. Viewing outsourcing through the lens of competition connects with early 20th century American institutional economics. The policy challenge is to construct institutions that ensure stable, robust flows of demand and income, thereby addressing the Keynesian problem while preserving incentives for economic action. This was the approach embedded in the New Deal, which successfully addressed the problems of the Depression era. Global outsourcing poses the challenge anew and calls for creative institutional arrangements to shape the nature of competition.

Key words: Outsourcing, globalization, competition, institutions.
JEL ref,: F1, F2, F3

Keywords: Global outsourcing, globalization, international trade, institutionalism.
JEL ref.: F00, F23

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I. The outsourcing controversy

International outsourcing of production and employment has recently attracted enormous attention in both the United States and Europe. For many, it has raised fears about impacts on domestic labor markets. These fears include the possibility of a fresh wave of structural unemployment and erosion of wages, benefits, employment security, and workplace conditions in the economy at large. Balanced against this, some (see for instance Mankiw and Swagel, 2006) view offshore outsourcing as a favorable development related to the further extension of the international division of labor and application of comparative advantage. To this group, outsourcing promises significant future gains in wages and living standards without any adverse long-term employment effects.

Understanding offshore outsourcing involves two distinct exercises. The first involves understanding the phenomenon, while the second is assessing its likely empirical impact. The focus of the current paper is on the phenomenon. Outsourcing is represented as a central element of globalization, and policy-makers need to understand its economic basis if they are to develop effective policy responses.

The paper maintains that outsourcing should be viewed as a qualitatively new phenomenon that is to best understood as a new form of competition. Responding to it calls for the development of policies that enhance national competitiveness and establish new rules governing the nature of global competition. Viewing outsourcing through the lens of competition connects with early 20th century American institutional economics. The policy challenge is to construct institutions that limit retrograde competition while preserving incentives for economic action. At the same time, these institutions must promote stable flows of demand and income, thereby addressing the Keynesian problem of inadequate aggregate demand. This was the analytical foundation of the approach embedded in Franklin Roosevelt's New Deal in the United States, and it gave rise to a wave of economic prosperity after World War II. Global outsourcing represents a new economic challenge that calls for a new set of institutions. Addressing such challenges is always difficult, but the challenge of global outsourcing is compounded by lack of global regulatory institutions and changes in the balance of political power that make it difficult to enact needed reforms.

Lastly, global outsourcing is enormously facilitated by technological innovations associated with computing, electronic communication, and the Internet. However, it is important to recognize that the debate surrounding outsourcing is not about the benefits of technology. It is about the nature of competition and what constitute appropriate rules for governing competition within and between countries. Failure to recognize this can distract and confuse the issue, erroneously turning it into a debate about technology rather than rules of competition.

II. The economics of outsourcing

By way of beginning it is worth defining the meaning of some terms widely used in the outsourcing debate. Sourcing represents sources of supply, and these sources can be domestic or global. Outsourcing represents taking an activity that was previously produced within the boundaries of the firm, and having it sourced (supplied)

from outside the firm. Offshoring represents moving an activity that is produced within the firm to another country, but the activity continues to be produced within the firm in an international subsidiary. Finally, offshore outsourcing represents taking an activity that was previously produced within firm, and having it both sourced from another country and produced by an outside supplier. Both offshoring and offshore outsourcing can contribute to national job loss. The difference is that in the former case the activity continues to be produced within the firm, whereas in the latter case it is moved outside the firm. Over the last several decades there has been an ongoing outsourcing revolution as firms have redefined their production competencies. Initially, this revolution took the form of domestic outsourcing, and it was widely associated with the phenomenon of sub-contracting. More recently, it has taken the form of offshore or global outsourcing as firms have shifted to relying on foreign suppliers.

Offshoring and global outsourcing are empirically and theoretically contested phenomena. At the empirical level the problem is how to assess their empirical significance. Mankiw and Swagel (2006) adopt a "job count" approach in their assessment of the impact of outsourcing on the American economy, and argue that the number of jobs outsourced is relatively small compared to the total stock of jobs. For instance, they cite a Forrester Research report (McCarthy, May 2004) estimating that 830,000 U.S. jobs would be moved offshore by the end of 2005, while Goldman Sachs calculate that between 15,000 and 30,000 jobs are currently being offshored monthly. They claim that this is small relative to total U.S. employment of almost 135 million, and therefore conclude that the significance of employment offshoring has been blown massively out of proportion.

There are two problems with this naïve job count approach. The first less important problem is that the volume of outsourcing may increase significantly in future as firms become more globally active. This possibility was noted in the Forrester Research report, particularly as regards services. It has also been emphasized Blinder (2006) who documents the potentially wide array of future jobs that might be offshored.

The second more important problem is that job loss is not the right metric for measuring the economic impact of offshoring. Over time the economy will tend to recover some of the jobs lost, and the volume of employment almost always dominates the volume of unemployment. That means by definition the stock of jobs is likely to be large relative to flow turnover. Yet, outsourcing can still have significant impacts on wage levels and employment conditions by impacting workers' sense of employment security and bargaining power. These impacts need not show up in job flows. All that is needed is that workers sense a changed economic environment. Bronfenbrenner (2000) has clearly documented such bargaining power effects with regard to U.S. union workers. The problem is that these effects have been denied by mainstream trade economists who assert that labor markets are competitive, workers are paid their worth (i.e., their marginal product), and labor market competition for scarce labor protects workers from exploitation.

This observation leads into the theoretical controversy surrounding offshore outsourcing. Supporters of outsourcing interpret it as a natural extension of the motivation for trade. Just as the boundary between domestic market and non-market activities may change over time owing to technological innovations, so too the boundary between internationally traded and non-traded goods may change. From this perspective, technological advance has turned goods and services that were previously internationally non-tradable into goods and services that can now be internationally traded. The international application of the principle of comparative advantage to the production of these newly tradable goods and services can therefore yield additional gains from trade.

This conclusion regarding outsourcing and gains from trade has recently been challenged by Gomory and Baumol (2000) and Samuelson (2004). These authors use pure trade theory to examine the question of international catch-up, and they conclude that a country can lose if the catch-up takes place in the export industry of the advanced country. In this case the advanced country suffers an adverse terms of trade effect because the global supply of its exported product increases.

Though logically watertight, one problem with the Gomory-Baumol-Samuelson critique is that it focuses on export-sector related developments, whereas most of the concern about outsourcing seems to relate to potential developments in the service sector. Additionally, their critique of outsourcing is static in nature, focusing on changes in equilibrium patterns. An alternative institutionalist approach is to view outsourcing through the lens of competition. Such an interpretation sees it as changing the competitive process governing trade, giving rise to a new competitive regime in which both structure of bargaining power and the margins of competition (those areas where companies and countries compete) are changed.

From an institutionalist perspective, globalization has dramatically changed the structure of international competition. In many regards the process of change can be identified as beginning in the 1950s and 1960s with the emergence of multinational corporation (MNC) production. Initially, this output was primarily for local markets, as evidenced by the activities of such companies as Ford Europe and General Motors Europe, which manufactured for the European rather than the U.S. market. However, in the 1980s and 1990s the pattern changed significantly, and MNC production became increasingly targeted for export back to the United States. This change is exemplified in Mexico and China, which have become MNC production platforms.

There are two important economic features of the MNC revolution. First, MNC manufacturing has provided an important arena for business to learn how to render state-of-the-art technology and production methods globally mobile. Second, MNC activities offered a first margin within which capital was able to put American labor in international competition, and this competition has had significant adverse impacts on manufacturing wages, employment, and union membership (Bronfenbrenner, 2000; Bronfenbrenner and Luce, 2004).

The MNC revolution has received considerable attention. However, while it was taking place, a parallel and equally important revolution was occurring in the U.S. retail sector. This retail shake-up was linked to a new sourcing model based on big-box discount stores.[1]

Stage one of the U.S. retail revolution started 40 years ago with the emergence of large-volume discount stores like Wal-Mart, which was created in 1962. Initially, the business model was based on national sourcing, with the big-box stores buying from the cheapest national manufacturer. Such stores pitted producers against each other nationally, so that companies in New York were forced to compete with those in California. This new national rivalry provided lower prices, and it was largely beneficial because all suppliers were located in the United States and operated under broadly similar laws. However, even then there were negative effects, as the new competition encouraged manufacturing to move south to nonunion "right-to-work" states where organizing workers was more difficult and labor costs were lower.

Stage two of the retail revolution began in the 1980s, when the big-box discount stores started going global with their sourcing model. As a result, U.S. suppliers were not just placed in national competition, they were now placed in international competition. No longer was New York just competing with California; U.S. producers were now measured against companies in Mexico, Indonesia, and China. The economic logic of this global sourcing model is simple. Scour the world for the cheapest supplier and lowest cost—the so-called "China price"—and then require U.S. manufacturers and workers to match it if they wish to keep your business.

This new global sourcing retail model has had profound effects. The commercial success of the model means that once one retailer adopts it, others are compelled to also adopt it in order to remain competitive. Consequently, big-box discounting has spread to every corner of retailing, putting the entire consumer goods manufacturing sector in international competition. Additionally, the model pressures domestic companies to pursue offshore production (i.e., become multinational) in order to compete with foreign suppliers. These dynamics, though originating in the retail sector, have thereby eroded manufacturing jobs and wages. The model does indeed deliver low prices, but it does so at a high cost.

Outsourcing can be viewed as an application of the retail sector's global sourcing model to manufacturing. In effect, manufacturers are now also looking to source globally, and they too are asking their suppliers to meet the "China price." The development of global sourcing is exemplified by the American auto component giants, Visteon and Delphi. Initially spun off from their respective parent companies, Ford and General Motors, Visteon and Delphi engaged in national competition. In 2005, Ford and General Motors both announced that they were shifting to a global sourcing model and that their spin-offs would in future have to meet the China price if they wished to keep business. Given their higher union wages and benefits, both Visteon and Delphi have been shedding jobs and shifting production offshore, including to China. However, both have found it increasingly difficult to compete, and Delphi filed for Chapter 11 bankruptcy in October 2005.

It is now becoming clear that the global sourcing business model can also be applied to the services sector. Owing to improvements in electronic communication and the Internet, many services that were previously non-tradable have become tradable. These include basic computer systems maintenance and software program-

[1] The seminal article on the emergence of this sourcing model is Gereffi (1994). The use of this sourcing model by the retail sector is documented by Hamilton (2005).

ming, tax preparation and accounting, architectural planning, and telephone call centers. Even retail sales are potentially tradable, as indicated by the success of the Amazon.com business model. This means that services will be the next area where the global sourcing model will be applied, with corresponding effects on compensation and employment security.

The maturation of globalization can be viewed as combining the developments of the last several decades into a highly synergistic system. There are four elements to this mature system. The first element is the global sourcing model discussed above, which was initially developed in the retail sector and is now being applied everywhere. The second element is the mobility of capital, technology, and methods of production. This mobility is rooted in the MNC experience with foreign production platforms, and it also links with technological innovations that have facilitated the transfer of technology and the international coordination of business activity. The third element is international economic policies that have dismantled trade barriers and promoted international economic integration, thereby bringing down the cost of moving goods across borders. Technology, in the form of lowered costs of transportation, has had a similar impact by also lowering costs of moving goods over long distances. The fourth element of mature globalization is the addition of two billion workers to the global labor market, given the end of economic isolationism in India, China, and the former Soviet bloc countries.[2]

Whereas the initial era of globalization (1945–1980) was one of classical free trade involving the movement of goods across international boundaries, the new era (since 1980) also includes mobile capital and technology. Consequently, all countries have access to similar methods of production, so cost arbitrage (especially wage arbitrage) becomes a critical driver of the system.

Putting the pieces together, changed competition (the Wal-Mart business model) plus changed technological conditions and policy (globalization of production) plus two billion new workers (the end of economic isolationism) add up to downward wage and benefit pressures in U.S. labor markets and rising income inequality. The economic logic is simple. When two swimming pools are joined together, the contrasting water levels will equalize.

III. Institutionalism versus Neo-classical trade theory

Such an equalization process shares some common features with the Stolper-Samuelson (1941) theorem of neo-classical trade theory. According to that theorem, when a rich capital-abundant country engages in free trade with a poor labor-abundant country, wages in the rich country fall. The Stolper-Samuelson effect emphasizes the income distribution impacts of trade, and it is modeled in a world in which countries share the same technology, perfect competition rules, there is full employment, and international production is determined according to the principle of comparative advantage.

Globalization adds greater realism to the assumption of shared technology, and it therefore strengthens the relevance of Stolper-Samuelson. Globalization has also been associated with a fall in the cost of transportation—which is a form of sand in the wheels of trade—and this too strengthens the Stolper-Samuelson effect. Lastly, by making capital mobile between countries, globalization tilts the Stolper-Samuelson effect (which is derived under the assumption of capital immobility) toward full-blown neo-classical factor price equalization. This is tantamount to putting the Stolper-Samuelson effect into hyperdrive.

The above wage and income distribution features of neo-classical trade theory are consistent with institutionalist logic. However, there are also significant differences between the two perspectives, and these differences mean that the neo-classical Stolper-Samuelson and factor price equalization results only partially capture institutionalist concerns. First, whereas neo-classical trade theory assumes full employment, an institutionalist perspective allows for less than full employment. Consequently, offshoring can have unemployment effects that impact both prices (including wages) and quantities. Second, an institutionalist perspective denies that global production is necessarily organized around the principle of comparative advantage. Instead, global production is organized on the basis of competitive advantage. This may coincide with comparative advantage, but there is no automatic pre-

[2] Freeman (2004) has emphasized the significance of the addition of 1.5 billion workers to the global labor market. The end of economic isolationism in China, India, and the former Soviet bloc added three billion persons to the global economy, of which approximately half are economically active. However, Freeman believes that globalization is being driven by classical comparative advantage, so the wage effects of increased global labor supplies can potentially be offset by the production gains that come from reallocating global production in accordance with the principle of comparative advantage.

sumption that it will. This raises questions about automatically assuming that offshoring automatically raises global productivity since highly productive facilities can be closed and replaced by less productive foreign facilities because of nominal cost differences. Third, the neo-classical Stolper-Samuelson and factor price equalization results are derived in the context of perfect competition, whereby economic power is completely absent. From an institutionalist perspective power is always present, and globalization has changed power relations by giving firms greater exit options. This shift has increased firms' power versus both labor and governments, with the shift in power being brought about by new institutional patterns of competition based on new business models, technologies, and changed economic policies. Finally, institutionalists view economic activity as always taking place in the context of laws, regulations, and business customs. These facets of business life are absent in the neo-classical model with perfect competition, and that model therefore misses how global outsourcing allows firms to arbitrage the regulatory and business environment. In effect, globalization creates new margins of competition.

IV. Macro-economic consequences of changing global competition

The changed micro-economic competitive conditions associated with globalization have significant macro-economic implications. A first implication concerns income inequality, which has increased in almost all countries (Milanovic, 2005). Within the U.S. this increase has occurred in two stages. During 1980s and 1990s the wage-profit share was largely unchanged but family income inequality increased, suggesting changes in the distribution of wages favorable to upper-income managerial workers. This has been followed since 2000 by a significant increase in the profit share.[3]

A second implication concerns the structure of global demand. The new global sourcing model encourages companies to shift production offshore and export back to their home base. In developing countries there is an incentive to keep wages down de spite productivity growth in order to retain international competitiveness, as exemplified in Mexico where real wages have stagnated over the past twenty years. These pressures retard domestic demand and the emergence of a large middle class. Consequently, developing countries are compelled to rely on export-led manufacturing growth whereby they sell to developed countries rather than developing domestic consumption markets.

This configuration poses significant macro-economic dangers. The worsening of developed country income distribution poses long run problems for maintaining a level of aggregate demand capable of generating full employment. Internationally, the extensive reliance on export-led growth has contributed to a globally unbalanced economy in which developing countries rely on the U.S. market. This imbalance is reflected in the enormous U.S. trade deficit. The danger is that if the U.S. economy slows, the entire global economy will slow too.

Though the new competitive global micro-economic structure has contributed to low consumer prices that have benefited Northern consumers, it has also been adversely transforming the structure of income and aggregate demand generation. In the U.S. there has been a gradual hollowing out of the middle class.[4] In the global South, a surplus labor condition combined with South–South competition for Northern export markets has retarded Southern wage growth that could provide the future foundation for global aggregate demand. With global supply growing as a result of export-led manufacturing growth, this configuration carries the risk of global deflationary pressures.[5]

Thus far, these adverse macro-economic developments have been kept at bay by rolling stock market and housing price bubbles, and by increased access to credit

[3] The increase in global income inequality, within and between countries, is documented by Milanovic (2005). The increase in U.S. family income inequality is documented by Mishel et al. (2006). Krugman (1995) attributes 10 percent of the increase in U.S. wage inequality in the 1970s and 1980s to trade. Cline (1997) attributes 37 percent of the increase to trade. Palley (1999a) examines overall income inequality using the U.S. family income gini coefficient, and reports that 24 percent of the increase in inequality between 1980 and 1997 is directly attributable to increased openness, and this rises to 34 percent if the negative effect of trade on union density is taken into account. Kletzer (2001) has documented the direct wage losses of those actually losing jobs owing to trade.

[4] The hollowing of the middle class is documented by Mishel et al. (2006) who show how family income inequality has increased (p. 54–65) and the relatively more rapid expansion of low-paying jobs (p. 166N69). They explain these trends as a result of trade and union decline, and express skepticism that they are due to a shift in demand toward high-skilled workers (p. 169–200), which is the conventional neo-classical explanation (Levy and Murnane, 2004).

[5] The global deflationary risks of export-led development are explored in Palley (2003) and Blecker and Razmi (2005).

for consumers. In the U.S. particularly, these developments have enabled households to maintain consumption spending, thereby maintaining global aggregate demand. However, ever-rising debt-to-income ratios are not sustainable as this produces rising debt service burdens. Similarly, asset price inflation significantly in excess of the general rate of inflation is also not sustainable as this produces excessive asset valuations. This suggests that these trends must slow or even reverse, and when that happens the global economy could suffer a severe recession owing to accumulated financial imbalances and inadequate aggregate demand. Moreover, recovery from such a recession could prove difficult because of large debt over-hangs and permanently atrophied structures of income and demand generation.

V. How should policy respond? Rediscovering Keynesian and Institutionalist economics

The current model of globalization brings low consumer prices as advertised. However, it delivers low prices at the high cost of undermining the structure of income and demand generation. Today's economic conditions have hints of the 1920s, a decade marked by a credit-driven boom in U.S. and relative stagnation in the rest of the world. Meanwhile, income and wealth inequality in the U.S. have returned to levels that prevailed in the 1920s (Wolff, 2001). This raises the possibility of a new era of global economic stagnation, that in a worst case scenario could replay problems similar to those that afflicted the global economy in the 1930s.

The problems of the Depression era were solved after World War II by application of new economic ideas developed in the 1930s. These ideas have continuing relevance in the era of globalization. Unfortunately, the economic success that ensued in the thirty years after World War II contributed to a belief that the economic problem had been permanently solved and that the policies and institutions adopted after the Depression were no longer needed. The result has been a gradual expunging of the thinking forged in the Depression, and economic theory has slowly drifted back to the economics of the pre-Depression era. Carried by this tide, economic policy-makers have been persuaded to create a modern variant of the pre-Depression era economy under the rubric of globalization.

One lasting contribution of the 1930s is associated with the British economist John Maynard Keynes, who identified the importance of aggregate demand for determining the level of employment and output. In the Keynesian model, unemployment can result from reduced household and business spending. At best, free markets are slow to remedy such conditions, and at worst they can get trapped with permanent high unemployment.

Keynes recognized that the price system does not automatically generate sufficient demand, and what works in individual markets does not automatically work for the economy as whole. In individual markets, lower prices make a good relatively cheaper thereby providing an incentive to switch spending from elsewhere. However, this does not work for the economy as a whole because all prices are falling. Indeed, the process can even work in reverse because falling prices increase debt service burdens of businesses and households that are debtors, thereby potentially lowering total demand and bankrupting the banking system. Consequently, there is a reason for policy to step in and stabilize demand through monetary (interest rate) and fiscal (government budget) policy.[6]

A second vital intellectual contribution came from American institutionalist economists, the leading lights of which were John Commons, Thorsten Veblen, and Wesley Mitchell. Institutionalists emphasized the importance of the nature of competition and the problem of destructive rivalry—what Commons (1909, 68–69) termed the "competitive menace." This idea resonates with today's notion of the "race to the bottom." What appears to maximize well-being from an individual perspective can be sub-optimal once the competitive interplay of actions is taken into account.[7]

Institutionalist thinking constructs the policy problem in terms of "regimes of competition," with some regimes promoting societal welfare better than others. In the 1930s, President Franklin Roosevelt's New Deal policies embodied much institutionalist thinking. In combination with the adoption of a Keynesian macro-economic stabilization policy, the New Deal eventually solved the crisis of the Depression era and made way for the prosperity that followed World War II. The innovations of the period included new labor laws establishing the right to organize, the minimum wage, the 40-hour work week, and the right to overtime pay. In the financial realm, creative reforms included the establishment of the Securities and Exchange Com-

[6] Tobin (1975, 1980) and Palley (1999b) have examined why generalized price deflation can be unstable.

[7] Atkinson (1997) has also emphasized the relevance of American institutionalist economic thinking for understanding globalization.

mission to oversee financial markets. Today's challenge is to come up with a similarly innovative set of arrangements that addresses globalization and outsourcing.

The New Deal incorporated a collection of bold policies that fashioned an acceptable regime of competition. Responding to global sourcing will also require an insightful array of policies. As with the New Deal, there is no silver bullet. With regard to rules governing worldwide competition, international labor standards are key to establishing a floor under the global labor market and ruling out retrograde competition. At the same time, they are good for economic efficiency and development (Palley, 2004, 2005). Concerning domestic issues, revitalizing unions is key to ensuring that productivity gains are shared equitably and result in a distribution of income that generates full employment. This calls for labor law reform that gives real meaning to the legal right to organize.

There is also a need for new arrangements that discourages tax competition within and between countries. Such competition is generated by corporations shopping for tax abatements and lower rates as conditions of making investments. The result is either an unfair shift of the tax burden onto labor incomes or an underfunding of needed public investment and spending when corporate tax avoidance strips the public purse of revenue.

Another area requiring new institutional arrangements is exchange rates. Here, the need is to prevent countries from using undervalued exchange rates as a means of competing. Engaging in competitive devaluation is a form of beggar-thy-neighbor economics wherein countries rely on demand in foreign markets rather than building domestic markets. Undervalued exchange rates are an unfair subsidy that distorts the pattern of trade. They also risk causing global deflation because they promote increased supply of exports without increasing global demand.

With regard to national competitiveness, countries need to invest in education that raises worker productivity. There is also a need for job loss assistance and active labor market policies that help displaced workers cope with income losses and obtain training that prepares them for productive future employment. In this regard, a system of wage insurance that insures workers against wage losses from job displacement, such as that proposed by Kletzer and Rosen (2005), can help. More generally, a full-blown "flexicurity" social safety net such as that operated in the Nordic countries is desirable. Such a system protects workers against economic losses associated with economic change, thereby making them open to accepting and living with change (*The Economist,* 2006).

In the United States there is a special need to attend to the problem of health insurance, which is currently a job cost, since premiums are tied to employment. This crisis is exemplified by General Motors, where the cost of each car made in its U.S. plants includes $1,500 of worker health insurance. Health insurance coverage needs to be detached from jobs, and this suggests a national health plan financed out of general tax revenues.

All of these proposals point to the need for enhanced government provision of insurance and social safety nets. However, as documented by Rodrik (1997), the regulatory and tax arbitrage that is promoted by globalization and global outsourcing undercut government's ability to provide such services. Thus, Rodrik (1997, p. 57–67) reports that country economic openness negatively impacts government social spending, negatively impacts tax rates on capital incomes, and positively impacts tax rates on labor incomes. These findings support claims of how globalization has tilted the balance of power in favor of capital, and they also implicitly confirm the need for international cooperation to combat tax competition.

VI. Conclusion: the politics of policy response

The emergence of global outsourcing enormously complicates policy issues, both intellectually and politically. The ability to outsource worldwide calls for new forms of international regulation because it undermines the effectiveness of many existing national arrangements. Yet, construction of an acceptable regime of international competition must be accomplished in a political environment lacking effective institutions of international economic governance and in which national governments are weakened and corporations strengthened by the enhanced mobility of capital.

Historically, political economy has been constructed around the divide between capital and labor, with firms and workers at odds over the division of the economic pie. Within this construct, labor is usually represented as a monolithic interest, yet the reality is that labor has always suffered from internal divisions—by race, by occupational status, and along many other fault lines. Neo-liberal globalization has in many ways sharpened these divisions to labor's disadvantage and capital's benefit.

One of these fault lines divides workers from themselves. Since workers are also consumers, they face a divide between the desire for higher wages and the desire for lower prices. Historically, this identity split has been exploited to divide union

from nonunion workers, with anti-labor advocates accusing union workers of causing higher prices. Globalization amplifies the divide between people's interests as workers and their interests as consumers through its promise of ever-lower prices. Low prices do indeed yield benefits, but against this must be balanced globalization's impact on wages, work conditions, and the balance of political power.

Globalization also affects the economy unevenly, hitting some sectors first and others later. The process can be understood in terms of the hands of a clock. At one o'clock is the apparel sector; at two o'clock the textile sector; at three the steel sector; at six the auto sector. Workers in the apparel sector are the first to have their jobs shifted to lower-wage venues; at the same time, though, all other workers get price reductions. Next, the process picks off textile sector workers at two o'clock. Meanwhile, workers from three o'clock onward get price cuts, as do the apparel workers at one o'clock. Each time the hands of the clock move, the workers taking the hit are isolated. In this fashion, globalization moves around the clock with labor perennially divided.

Manufacturing was first to experience this process, but technological innovations associated with the Internet are putting service and knowledge workers in the firing line as well. Online business models are making even retail workers vulnerable, as evidenced by Amazon.com which has opened a customer support center and two technology development centers in India. The problem is that each time the hands on the globalization clock move forward, workers are divided: the majority is made slightly better off while the few are made much worse off.

Balanced against this, globalization also impacts capital, creating a new split between bigger internationalized firms and smaller firms that remain nationally centered. Larger multi-national corporations that have gone global benefit from cheap imports produced in their foreign factories. Conversely, smaller businesses that remain nationally centered in terms of sales, production and input sourcing are threatened by imports. In the U.S., this division has been brought into sharp focus with the debate over the trade deficit and the overvalued dollar. In previous decades, U.S. manufacturing as whole opposed running trade deficits and maintaining an overvalued dollar because of the adverse impact of increased imports. This time round U.S. manufacturing has been divided with multinational corporations supporting an over-valued dollar and smaller domestic manufacturers opposing it. A similar division within the ranks of business and capital likely exists in Europe.

This division opens the possibility of a new alliance between labor and those manufacturers and businesses that remain nationally based. However, such an alliance will always be problematic because of perennial underlying tensions between business and labor over the wage–profit division. Moreover, business may try to address its own internal division by promoting a domestic "competitiveness" agenda aimed at weakening regulation, reducing corporate legal liability, and lowering employee wages and benefits such as paid vacation time—an agenda designed to appeal to both nationally and internationally centered business, but at the expense of workers.

Solidarity has always been key to political and economic advance by working people, and it is key to mastering the politics of globalization. Developing a coherent story about the economics of neo-liberal globalization around which working people can coalesce is a key ingredient for solidarity. That is why economics is so politically important. Economists tell stories about what is going on in the economy, and there is need for an alternative story to that provided by neo-liberal economics. An institutionalist–Keynesian perspective provides that alternative.

Understanding how globalization divides labor can help counter cultural proclivities to individualism, as well as other historic divides such as racism. However, as if this were not difficult enough, globalization creates additional challenges. National political solutions that worked in the past are not adequate to the task of controlling international competition. That means the solidarity bar is further raised because international solidarity is needed for support of new forms of international economic regulation such as labor standards, environmental standards, capital controls, exchange rate coordination, and tax harmonization.

References

G. Atkinson (1997) "Capital and Labor in the Emerging Global Economy," *Journal of Economic Issues* 31: 385–91.

Blecker, R.A., and Razmi, A. (2005) "Moving up the Ladder to Escape the Adding-up Constraint: New Evidence on the fallacy of Composition" Manuscript, Department of Economics, American University.

A.S. Blinder (2006) "Offshoring: The Next Industrial Revolution," *Foreign Affairs,* March/April.

K. Bronfenbrenner (2000) "Uneasy Terrain: The Impact of Capital Mobility on Workers, Wages, and Union Organizing," Report prepared for the U.S. Trade Deficit Review Commission, Washington, DC.

K. Bronfenbrenner and S. Luce (2004) "The Changing Nature of Corporate Global Restructuring: The Impact of Production Shifts on Jobs in the U.S., China, and Around the Globe," Report prepared for the U.S.–China Economic and Security Review Commission, Washington, DC.

Cline, W. (1997) Trade and Income Distribution, Washington, D.C.: Institute for International Economics.

J.R. Commons (1909) "American Shoemakers, 1648–1895: A Sketch of Industrial Evolution." *Quarterly Journal of Economics* 24: 39–84.

R.B. Freeman (2004) "Doubling the Global Work Force: The Challenge of Integrating China, India and the Former Soviet Bloc into the World Economy," lecture given at the University of Utah, Salt Lake City.

Gomory, R.E., and W.J. Baumol (2000) *Global Trade and Conflicting National Interest,* Cambridge: MIT Press.

G. Gereffi (1994) "The Organization of Buyer-driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks," in G. Gereffi and N. Korzeniewicz (eds.) *Commodity Chains and Global Capitalism,* Westport: Praeger.

G.R. Hamilton (2005) "Remaking the U.S. Economy: U.S. Retailers and Asian Manufacturers," Prepared statement for the U.S.-China Economic and Security Review Commission hearing on China and the Future of Globalization, New York, May 19–20, Washington: U.S. Government Printing Office.

Kletzer, L. (2001) Job Loss from Imports: Measuring the Costs, Washington, DC: Institute for International Economics.

Kletzer, L.G., and H. Rosen (2005) "Easing the Adjustment Burden on Workers," in C.F. Bergsten (ed.) *The United States and the World Economy: Foreign Economic Policy for the Next Decade,* Washington DC: Institute for International Economics.

Krugman, P. (1995) "Growing World Trade: Causes and Consequences," Brookings Papers on Economic Activity, Washington D.C.: Brookings Institution.

Levy F., and Murnane, R.J. (2004) *The New Division of Labor: How Computers are Creating the Next Job Market,* Princeton: Princeton University Press.

McCarthy, J. (2004) "Near-Term Growth of Offshoring Accelerating: Resizing U.S. Services Jobs Going Offshore," Cambridge, Mass., Forrester Research, Inc., May 14.

Mankiw, N.G., and Swagel, P. (2006) "The Politics and Economics of Offshore Outsourcing," Department of Economics, Harvard University.

Milanovic, B. (2005) *Worlds Apart: Managing International and Global Inequality,* Princeton: Princeton University Press.

Mishel, L., Bernstein, J., and Allegretto, S., (2006) *The State of Working America 2006/07,* Cornell: LR Press (an imprint of Cornell University Press).

Palley, T.I. (2006) "The Causes of High Unemployment: Labor-Market Scelerosis v. Macro-economic Policy," in E. Hein, A. Heise, and A. Truger (eds.), *Wages, Employment, Distribution and Growth,* London: Palgrave/Macmilllan.

Palley, T.I. (2005) "Labor Standards, Democracy and Wages: Some Cross-country Evidence," *Journal of International Development,* 17: 1–16.

Palley, T.I. (2004) "The Economic Case for International Labor Standards," *Cambridge Journal of Economics,* 28: 21–36.

Palley, T.I. (2003) "Export-led Growth: Is There Any Evidence of Crowding-Out?," in P. Arestis, M. Baddeley, and J. McCombie (eds.), *Globalization, Regionalism, and Economic Activity,* Cheltenham: Edward Elgar.

Palley, T.I. (1999a) "Manufacturing Matters: The Impact on Productivity Growth, Wages, and Income Distribution," AFL–CIO Economic Policy Working Paper, E035, Washington DC.

Palley, T.I. (1999b) "General Disequilibrium Analysis with Inside Debt," *Journal of Macroeconomics,* 21: 785–804.

Rodrik, D. (1997) Has Globalization Gone Too Far?, Washington, DC: Institute for International Economics.

Samuelson, P. (2004) "Where Ricardo and Mill Rebut and Confirm Arguments of Mainstream Economists Supporting Globalization," *Journal of Economic Perspectives,* 18(3): 135–46.

W.F. Stolper and P.A. Samuelson (1941) "Protection and Real Wages," *Review of Economic Studies* 9: 58–73.

The Economist (2006) "Denmark's Labor Market: Flexicurity," September 7.

Tobin, J. (1975) "Keynesian Models of Recession and Depression," *American Economic Review* 65: 195–202.

Tobin, J. (1980) *Asset Accumulation and Economic Activity,* Chicago: Chicago University Press.

Wolff, E. (2001) *Top Heavy: The Increasing Inequality of Wealth in America and What Can Be Done About It,* New York, New Press.

BIOGRAPHY FOR THOMAS I. PALLEY

Dr. Thomas Palley is an economist living in Washington, DC. He holds a B.A. degree from Oxford University, and a M.A. degree in International Relations and Ph.D. in Economics, both from Yale University.

He has published in numerous academic journals, and written for *The Atlantic Monthly, American Prospect* and *Nation* magazines.

Dr. Palley runs the Economics for Democratic & Open Societies Project, the goal of which is to stimulate public discussion about economic arrangements and conditions needed to promote democracy and open society.

Dr. Palley was formerly Chief Economist with the U.S.–China Economic and Security Review Commission. Prior to joining the Commission he was Director of the Open Society Institute's Globalization Reform Project, and before that he was Assistant Director of Public Policy at the AFL–CIO.

Dr. Palley is the author of *Plenty of Nothing: The Downsizing of the American Dream and the Case for Structural Keynesianism* (Princeton University Press) and *Post Keynesian Economics* (Macmillan Press).

Some recent policy articles include "External Contradictions of the Chinese Development Model," *Journal of Contemporary China,* February 2006; "The Questionable Legacy of Alan Greenspan," *Challenge,* November-December 2005; "The Economic Case for International Labor Standards," *Cambridge Journal of Economics,* January 2004; and "Asset Price Bubbles and the Case for Asset-Based Reserve Requirements," *Challenge,* 2003.

Chairman MILLER. Thank you, Dr. Palley.

Ms. Furchtgott-Roth.

STATEMENT OF MS. DIANA FURCHTGOTT-ROTH, DIRECTOR, CENTER FOR EMPLOYMENT POLICY AND SENIOR FELLOW, THE HUDSON INSTITUTE, WASHINGTON, D.C.

Ms. FURCHTGOTT-ROTH. Mr. Chairman, thank you very much for inviting me to testify today. I was so impressed with that Murdock Center. I would so much like to visit it. It sounds like it has so many opportunities. It looked just beautiful in the pictures.

Unemployment rates right now are 4.9 percent for men 20 and above and 4.8 percent for women. Despite the high oil prices, we are still not in a recession. Yet, economic disruptions are causing a loss of jobs, and we need to figure out how to deal with this. Workers are our most valuable asset, and the question is how can we make the disruptions as little as possible.

The Labor Department has many programs which are outlined in my written testimony to help unemployed workers. About 97 percent of workers are covered by unemployment insurance. Most unemployed workers find work relatively quickly. Last year, for example, we had about 59 million new hires in our workforce of 154 million, and we had about 57 million separations.

The United States has benefited from globalization because a lot of the goods that we export create jobs for Americans, so whereas

some of the jobs are lost, we create many more jobs throughout export industries, particularly due to the current state of our dollar, which has made our exports very competitive.

We also have lower-priced goods here that make American wages go further. If you go to places like Wal-Mart or Target, we import a lot of goods, and people buy those, and their paychecks go further.

Some, however, can't find work because of economic disruption, and we need to find a way how to help them. I have a few suggestions for reforming Trade Adjustment Assistance, which is the main program to help trade-assisted workers.

One thing we need to do is make it administratively simpler. It is very difficult to fill out the paperwork. The health insurance component, in particular, requires paying for health insurance upfront and then getting a credit back the next year. And something has to be done to fix that.

Also, all trade-affected workers are not all the same, and what we need to do is find individualized plans for everybody. A woman, for example, who is laid off from the Pillowtex plant isn't the same as, say, a man who is laid off from Ford or General Motors. They have different sets of skills, and they can get different sets of jobs. So we need to have the one-stop staff and the one-stop centers work individually with unemployed workers and provide individual plans for training, because they can have different kinds of training. People can benefit from different kinds of training.

We should require Trade Adjustment Assistance recipients to register at one-stop centers and check computerized listings, preferably with individual guidance. We need to use high-quality measures to hold the staff at one-stop centers accountable for making sure that funds go to training that are likely to have a beneficial affect.

We also need to be using more community colleges. Community colleges are a vast resource throughout our country. They can turn on a dime in terms of professors. If you have more people sign up for a class, they can hire more professors in that area. If they don't have demand for a class, then that professor just doesn't teach that semester. And that is very useful, especially with regard to nurses. A lot of community colleges, for example, are constrained in terms of the amount of nurses that they can take, because there just aren't enough people to teach it. And these are things that need to be fixed.

We also need to take a close look at how we educate workers. We need to be educating workers, not just for one job, but for a whole career, for a series of jobs in a career. We need to work on high-school dropout rates, making these dropout rates lower, having more high school students graduate from college and working on one project that looks at education in the State of Florida. Not only does Florida have a low graduation rate, but it also has a very mixed package of what classes that these students are taking, and we need to have more attention, not only to having students graduate but also to the training they are receiving.

We also need to pay attention to vocational training and see if that is an option. All these things would make it easier for someone to find another job after they are laid off.

What we don't need is another $9 billion program. The *Trade and Globalization Act* would extend the service in Government sectors, would certify the whole industry if just three firms were affected for Trade Adjustment Assistance or if the ITC certified that there were unfair imports. It would extend benefits to two and one-half or three years. It would prevent anyone except a State worker from advising a TAA recipient on what kind of job to take, and this isn't anything that would benefit these workers. So I would suggest that Trade Adjustment Assistance can be helped with a relatively small number of changes. These are changes that you Members can do and help with, and that would be most helpful for these workers.

Thank you very much, and I would be glad to answer any questions.

[The prepared statement of Ms. Furchtgott-Roth follows:]

PREPARED STATEMENT OF DIANA FURCHTGOTT-ROTH

Mr. Chairman, Members of the Committee, I am honored to be invited to testify before your Committee today to speak on the subject of promoting U.S. worker competitiveness in a global economy.

Currently I am a senior fellow at the Hudson Institute. From February 2003 until April 2005, I was Chief Economist at the U.S. Department of Labor. From 2001 until 2003, I served at the Council of Economic Advisers as Chief of Staff and special adviser.

The United States has one of the lowest unemployment rates in the industrialized world. In April 2008, the latest month for which comparable data are available, Americans had an unemployment rate of 5.0 percent, while unemployment rates in the Eurozone were 7.1 percent; in France, 8.1 percent; in Germany, 7.6 percent; in Spain, 9.6 percent; and in Canada, 5.3 percent. Only Japan had a lower rate than the United States.

Last month, although the unemployment rate rose to 5.5 percent, unemployment rates among adults 20 and over remained below five percent. Unemployment rates for men were 4.9 percent, and for women were 4.8 percent. The jump in the unemployment rate was due to unemployment of teenagers, who have been priced out of the job market by last summer's hike in the minimum wage.

Skilled workers are important for global competitiveness. We live in an open, global economy, and we compete against other countries to offer the best environment for investment and for firm location. We want firms to locate and expand in the United States, creating jobs here rather than going offshore. In order to do that, we need to provide a ready supply of labor and keep the smartest entrepreneurs and workers here. When our workers lose their jobs, we need to help them find new ones as effectively as possible.

Our challenge is to facilitate the movement of workers from some sectors to others. The need for skilled workers makes it all the more imperative that we modernize our workforce training programs and make them as efficient as possible.

Workers already have some protection from job loss. About 97 percent of wage and salary workers have unemployment insurance (UI), a federal-State program funded by employer payments that rise with the number of firm layoffs. The program gives many unemployed workers, who last month numbered 8.5 million, benefits for up to six months. Qualifications and benefit levels are set by individual states.

There are more than a dozen programs organized by the Labor Department to help train unemployed workers. I won't describe all, but let me review just a few. Workers adversely affected by trade have access to Trade Adjustment Assistance, a program that is projected to help 92,000 workers in FY 2008, at a cost of $9,000 per participant. Alternative Trade Adjustment Assistance (ATAA) compensates manufacturing workers age 50 and older who lose jobs to imports. If these workers take a job paying less than their previous position, they receive half the difference in wage between their new job, up to a level of $5,000 annually, for two years, a concept called "wage insurance."

The *Workforce Investment Act* program for adults is projected to have 296,000 participants in PY 2008, at an average cost of $2,900 per participant. This has a network of "One-Stop Centers" where unemployed workers can register for benefits, training, and available job openings. A related program, the *Workforce Investment*

Act program for dislocated workers expects to serve 319,000 participants, at an average cost of $3,750 per person. The Wagner Peyser Employment Service is projected to help 14 million participants, at a cost of $54 per person. Other programs, for youths, Native Americans, older Americans, and migrant and seasonal farm workers, also make important contributions.

Some have proposed expanding TAA to other sectors, such as services, in order to deal with problems of global competition. Last October, the House of Representatives passed the *Trade and Globalization Assistance Act of 2007,* at a cost of $9 billion over 10 years, and the bill is now awaiting action in the Senate. However, economic circumstances do not warrant such a drastic expansion of the program.

The *Trade and Globalization Assistance Act of 2007* would cover more workers with TAA, even those now covered under other programs, and give more benefits—hence the expensive $9 billion price tag. The bill would extend TAA to the service and the government sectors, claiming that these workers suffer from trade. Perhaps true, but services have generated over 90 percent of the eight million jobs created since the start of the jobs recovery in August 2003, and government has created another nine percent.

The bill would go further. Whereas workers in particular firms are now certified by the Labor Department as affected by trade and eligible for TAA, the bill would enable entire industries certified as TAA-eligible. If three firms in an industry were certified within six months, all workers in that industry could get benefits, even those at firms not affected by trade. Similarly, if the International Trade Commission certifies that there have been unfair imports of low-cost goods, all workers in the domestic industry would automatically be eligible for TAA.

In addition to expanding numbers of eligible workers, the bill would expand unemployment benefits. Workers in TAA can now receive up to two years of benefits, with an extra six months if they need remedial education. This would be increased to two-and-a-half years of benefits, with three years if remedial education is needed. So workers who can least afford it would be encouraged to stay out of work and lose three years' income.

The *Trade and Globalization Assistance Act of 2007* would prevent TAA-eligible workers receiving job advice from anyone other than a State worker. Unemployed workers on TAA walking into a career center would not be allowed to talk to job counselors from the private sector, the county, faith-based organizations, non-profits, or local governments. They would have to wait in line to see State workers.

TAA can be improved with less costly congressional legislation by focusing the program on training and re-employment, rather than on unemployment.

One reason that more people are not participating in the program might be that they are finding jobs on their own in the many growing industries in the United States. Industries such as education and health services and professional and business services have hired many more workers over the past few years.

Another reason could be because of administrative difficulties with applying for benefits. If this is the case, then it would be worthwhile to try to streamline the application process of the current program before expanding it.

Other measures to improve TAA could have some effect in shortening the period of unemployment. Workers affected by trade are all different, and it may be beneficial to have One-Stop staff work with TAA recipients to develop individualized plans to find new jobs and determine under what circumstances training is likely to have a large positive effect.

TAA recipients could be required to register at One-Stop career centers and periodically check computerized job listings for suitable jobs. Then, One-Stop staff could monitor recipients' job search to ensure that they are effectively looking for work.

The One-Stops could provide funds to cover direct training costs and stipends to provide income support, but only in cases where One-Stop staffs certify training is likely to have a high payoff.

In order to further increase incentives to take the best available job, the Labor Department could pay the additional cost of transportation to cover commuting to a job far from home for up to two years and paying a portion of relocation expenses. However, relocation payments should be contingent on remaining employed in an area for at least six months.

Before expanding any program, it's necessary to make sure that One-Stops are making the best use of their resources. We should use high-quality measures and standards to hold One-Stops accountable for ensuring funds go to workers assiduously searching for new jobs or obtaining training likely to have a large effect on subsequent earnings.

We also need to redirect the use of training funds to include more community colleges for helping unemployed workers. Community colleges provide some of the best training in the country. They train the majority of nurses and emergency personnel.

Forty-five percent of the Nation's freshmen are enrolled in community colleges. Studies have shown that when unemployed workers take targeted technical courses at community colleges, their future earnings increase.

For recipients not in training, an ideal performance measure would capture how much quicker recipients return to work than otherwise would be the case. For recipients in training an ideal measure would capture how much higher their earnings are and how much better other aspects of their jobs are than otherwise would be the case. The earnings/job-quality measure also is an appropriate secondary measure for recipients not receiving training.

Americans don't know whether expanding wage insurance, paying unemployed workers part of the difference between the salary of their old job and a lower salary of their new job, will solve problems of economic insecurity from globalization. But it might be worth trying in a few states to see if it works, rather than imposing a federal mandate.

In addition to workforce training, America needs to take a fundamental look at how we educate workers before they join the workforce. We need to lower our high-school dropout rates, if necessary by incorporating vocational training into the last years of high school, and encourage young people to get as much education as possible. This would prepare them for a succession of careers, rather than just one, and enable them to change jobs more easily.

In summary, economic circumstances do not warrant expanding TAA at the present time. A few changes in the administration of the program could make it more efficient without the need for comprehensive expansion. Further, integrating different types of federal training programs and making them more effective would help the unemployed make the best use of these services and obtain a new job more quickly.

Thank you for giving me the opportunity to appear before you today. I would be glad to answer any questions.

BIOGRAPHY FOR DIANA FURCHTGOTT-ROTH

Diana Furchtgott-Roth has been a senior fellow at Hudson Institute since 2005, and directs the Center for Employment Policy. Prior to joining Hudson, Ms. Furchtgott-Roth was Chief Economist of the U.S. Department of Labor. From 2001 to 2002 she served as Chief of Staff at the President's Council of Economic Advisers.

Ms. Furchtgott-Roth is the author of *Overcoming Barriers to Entrepreneurship in the United States* (Rowman and Littlefield, 2008) and the co-author of *The Feminist Dilemma: When Success Is Not Enough* (AEI Press, 2001) and *Women's Figures: An Illustrated Guide to the Economics of Women in America* (AEI Press, 1999). She is a weekly economics columnist for the *New York Sun.* Her articles have been published in *The Washington Post, The Financial Times, The Wall Street Journal, Investor's Business Daily, The Los Angeles Times,* and *Le Figaro,* among others, and she has appeared on numerous TV and radio shows, including *The Diane Rehm Show,* C–SPAN's *Washington Journal* and PBS's *The NewsHour with Jim Lehrer.*

Ms. Furchtgott-Roth was Assistant to the President and Resident Fellow at the American Enterprise Institute from 1993 to 2001. Prior to that, she served as Deputy Executive Director of the Domestic Policy Council and Associate Director of the Office of Policy Planning in the White House under President George H.W. Bush. From 1987 to 1991 she was an economist at the American Petroleum Institute, where she authored papers on energy and taxation. Ms. Furchtgott-Roth was a junior staff economist on the staff of President Reagan's Council of Economic Advisers from 1986 to 1987.

Ms. Furchtgott-Roth received her B.A. in economics from Swarthmore College and her M.Phil. in economics from Oxford University.

DISCUSSION

Chairman MILLER. Thank you. We will now have questions from the Committee Members, which consist only of me at this point. Rather than go through the exercise of recognizing myself for five minutes and then calling time on myself and then recognizing myself for another round, I will just ask questions. If one of the Members shows up, I will call on myself and recognize that Member for five minutes and proceed differently.

Dr. Russo and Dr. Palley both suggested that we were in a race to the bottom, and I think Dr. Palley more so in his testimony, that nations compete for investment and jobs that really use incentives like lower taxes, lower environmental standards, less expensive labor, and that that was exacerbated by certain features of the International Trading System.

How do we address that? What can we do about it? Dr. Palley first, then Dr. Russo, and then anyone else.

Dr. Palley.

Dr. PALLEY. Chairman Miller, I think this is absolutely right. I think the metaphor of a barge captures exactly what is going on in the global economy. There is a tremendous increase in mobility, internationally and of course, within our own borders. In some sense you could even think of the troubles before of the Rust Belt versus the Sun Belt. That was an early forerunner of what globalization is in the sense that it is now spilled outside our borders.

I think in so much we are all on the same page at some level here regarding sort of the Trade Adjustment Assistance Program, the details as it applies to the individual, the application to trade dislocations. I heard some difference from Ms. Furchtgott-Roth regarding an extension of the program to cover a broader range of workers. I myself think that that is a necessary feature of helping people deal with an increasingly dynamic world. I think a job loss is a job loss, be it due to technology or due to trade, and we should, therefore, be extending these type of features to help workers.

However, I think there is a very big difference when we look at sort of the macro picture, the global structure of what is involved, and I think you have a problem here of how to anchor the barge and to have the barge be steered in the right direction, in a direction that produces shared prosperity. You need a whole set of programs, and that is one of the troubles when we deal with globalization from a policy standpoint. Often our policy discussions are rather siloed, as in a sense today's is. Today we approach it first from—the main issue on the agenda seems to be Trade Adjustment Assistance, but in my own testimony I talked about the need for exchange rate rules, which has been a very, very important issue, was off the agenda when we constructed this globalized world, beginning 15 and 20 years ago without large trade agreements. We left trade exchange rates completely out of the picture. They are never part of trade agreements. They are clearly an absolutely essential piece of trade. More than any other factor they probably determine the direction of trade, certainly in the short run.

We need labor standards. Clearly as we found in our own national economic development in the late 1930s, we had a whole series of pieces of important labor legislation that established the preconditions in which prosperity could be shared. And that is a challenge that we need to get onto the international economic agenda. It must be part of our trade policy. Countries that don't want to participate in those type of arrangements would perhaps be excluded from participating.

Environmental standards, we see that is going to be more and more part of the discussion. That was siloed off as part of, sort of

global warming. Now we see it has economic implications as well, because countries can compete on the margin there.

I think it is very important. I know you heard in a previous hearing from Ralph Gomory about the role of bringing corporations back and realigning their interests with the national interest. What worked so well in the 1950s, that great expression, Engine Charlie Wilson's expression, about what is good for General Motors is good for the country. In a sense it was an accident. General Motors was really a national corporation. It perceived its North American operations as being restricted to North America. When that was the case, it is advancing its market share in the U.S., advancing its profits here, helped advance American prosperity. Now General Motors and lots of other corporations, of course, operate on a global basis, where they produce is good for their global bottom line, but not necessarily for our national income. And one of the classic examples is a company like Boeing. When Boeing offshores some its components' production for its new Dreamliner, that is going to take good jobs away from Seattle. On the other hand, because it can produce those pieces of componentry cheaper elsewhere, that will raise the company's bottom line.

So we need incentives, and I think Dr. Gomory talked about possibly thinking about rearranging the tax code to reward companies that increase value-added production here. I think one of the obvious changes that has been on the Congress's agenda for quite awhile—I know it was talked about several years ago, five years ago—is changing the corporate tax law so that we do not privilege profits earned offshore. A company right now that earns profits offshore pays no taxes on those profits until they are repatriated to this country. That is clearly a subsidy. It is an incentive to earn your profits offshore, keep them offshore, finance your investment out of those profits, and therefore build your production offshore. That is an easy no-brainer in my opinion.

But I hope that these comments illustrate how we are talking in a sense about an architecture and not one single piece of policy.

Thank you.

JOB PROTECTION

Chairman MILLER. Thank you, Dr. Palley.

Dr. Russo, how do we protect our jobs, protect our prosperity without——

Dr. RUSSO. First of all, I think Dr. Palley has taken care of most of the terrain that I would have discussed, and I think it is better for me just to—let me give you an example. And this is a story of Delphi and in our area, the subsidiary of General Motors was Packard Electric. That during the late 1970s had 14,000 jobs and started moving this work, first of all, to the Maquiladora sector in Mexico and became the largest employer in the Maquiladora sector. The workers and the union there negotiated three-tier wage levels to make sure they retained as many jobs as they possibly could, and there was discussion that this was all a part of an international division of labor within the company, and it made sense economically.

As this moved on into the 1990s, they continued to move jobs to Mexico, and then starting to de-industrialize parts of their sections

of Mexico when they found out the wages became $2 an hour, that they can get the jobs done at 20 cents an hour in China.

Now, when they were spun off from General Motors, they continued their moves offshore, and ultimately they went into bankruptcy. They, in an attempt to abrogate their collective bargaining agreements, to use the PBGC [Pension Benefit Guarantee Corporation] if necessary as a threat, to force General Motors to accept their pensions. And while all this is going on and they are in bankruptcy, one business editor called me and says, "Well, why don't the workers take more concessions?" And I said, "First to answer your question for me, how does a company in bankruptcy at that time have a stock value of $3.50?" Because investors know that Delphi is a global corporation, and they have secured their assets in China in the Eastern Automotive Triangle, and while they are in bankruptcy in the United States and in North America, what they are doing is they are building a $350 million R&D facility that will hire 3,000 engineers in Shanghai.

And when I was speaking at Peking University, this whole question, you know, what is Delphi? What is a corporation? What is the purpose of a corporation? Is it an entity that is involved with increasing shareholder values and moving inputs and assets around like pieces on a chess board? Or is a corporation an organization that has reciprocal responsibilities with shareholders and managers and employees and the nation-states in the creation of value?

I think that crucial question that was, I think, part of the first hearing, is very central to this discussion. Not just a simple economic policy, but a policy of what is a corporation.

Chairman MILLER. Mr. Rosen.

Mr. ROSEN. With your permission, Mr. Chairman, if I could just very briefly, I want to respond to your question in a bit of different way, which is what should we not do? And the first thing is we need to invest in this country. Currently investment in plant and equipment as a share of GDP is very low. It is below its 50-year trend. So we need to invest more in this country. We ourselves need to do more.

Number two, we need to have international agreements on trade and taxes and investment and all of those things, and instead over the last eight years we have pursued a policy of going after bilateral agreements. We spent a lot of time negotiating these agreements that amount to something like eight percent of our trade at the expense of our multi-lateral agreements, which now are basically at a standstill, and we are not even sure if they are going to be completed.

So first thing is we don't invest enough. Second of all, we have had a misguided trade policy over the last eight years, and the third are the issues that we are raising this morning in terms of how do we make, how do we assist in the transition. They are not the answer, but they are part of the answer, and we don't do that right either, and ironically, what we are doing is in some sense we are strengthening the targeted programs that only help a certain, few number of people, and the general programs are weakening.

And one last comment. I just want to say because I think it is always important to put all this in context, we talk and talk and talk about Trade Adjustment Assistance. Currently, only 50,000

people in this country are enrolled in the program. We are not talking about a program that is helping thousands and millions of people like unemployment insurance. It is 50,000 workers. And it gets a lot of attention, it gets a lot of resources because of the political importance of those people, but why are we only helping those people that way and not other people?

Chairman MILLER. Ms. Furchtgott-Roth, did you have a comment?

Ms. FURCHTGOTT-ROTH. Yes.

Chairman MILLER. Okay.

Ms. FURCHTGOTT-ROTH. Yeah. Thanks very much. Are we in a race to the bottom and what should we do about it? I would like to say we are not in a race to the bottom. We have had more globalization, but we are better off. I mean, if you look at where we are now compared with, you know, 30 years ago, we have more globalization, but we have a lower unemployment rate, we have lower inflation, people are better off, people have cell phones, computers, DVDs, this little Blackberry that made such a splash when Al Gore used it in 2000. So many people have them now. People eat out more. The houses that are built have air conditioning and heating. We have Toyota, BMW, Nissan with plants here in the United States producing more jobs for American workers and countless other foreign plants here, also creating jobs.

You asked what should we do about it. Well, one thing we should do to improve our economy, we should keep tax rates low. Tax rates are scheduled to go up on the first of January, 2011. I have just written a book that is been published by Lexington Books called, *"Overcoming Barriers to Entrepreneurship in the United States."* It just came out a couple of months ago. Tax rates are important to entrepreneurs. Many of them fall under individual tax rates. Their tax rate is scheduled to go up from 35 to 40 percent. I mean, it is no wonder investment in the United States as Mr. Rosen said is declining, if we are facing such a large tax hike in 2011.

We need to do something about our energy, our manufacturing sector is affected by our energy. Our airline industry is affected by energy. We need to be drilling offshore and in ANWR. We need to be building refineries and nuclear power plants. We can't look on energy as this dirty stuff that we don't need, because our manufacturing sector needs it.

We need to get rid of the ethanol mandate that is driving up food prices. Eggs cost about $2 or $3 a carton. I bought corn yesterday. It was three ears for a dollar, and it used to be five or six ears for a dollar. Milk. It is $3.50 a carton. Used to be, a gallon. Used to be $2 a gallon. We need to get rid of that ethanol mandate, which is going to require 36 billion gallons of ethanol in 2022, nine billion this year, and we just don't have the corn to deal with that.

And we need to pass more free trade agreements as Mr. Rosen said. We need to pass the Colombia Free Trade Agreement. Right now the Colombians can import anything they like here under the existing trade agreements, but we cannot export over there. And so our companies don't have markets for, in Columbia, and those need to be opened up.

So thanks very much for asking that question.

WAGES AND INFLATION

Chairman MILLER. Thank you. Are average wages keeping up with inflation?

Ms. FURCHTGOTT-ROTH. If you look at average wages in terms of benefits, total compensation, total compensation——

Chairman MILLER. That assumes then health care costs.

Ms. FURCHTGOTT-ROTH. Right.

Chairman MILLER. Which is——

Ms. FURCHTGOTT-ROTH. Exactly.

Chairman MILLER. But——

Ms. FURCHTGOTT-ROTH. Wages without benefits——

Chairman MILLER. Right.

Ms. FURCHTGOTT-ROTH.—are not keeping up with inflation, but the benefits are a more and more important component of total compensation.

Chairman MILLER. Because of the inflation of health care costs?

Ms. FURCHTGOTT-ROTH. Because of the high cost of health care. Yes. And the high cost of pensions.

A NEW METRIC FOR CORPORATE ACCOUNTABILITY

Chairman MILLER. Okay. Dr. Russo, you, and I think Dr. Palley, too, echoed what was said at our last hearing about the role of corporations and how they should not perhaps just be judged by their profitability but their other obligations, other than just the obligation to the shareholders. And, in fact, most corporations are not run for the shareholders either. They are run for the top executives.

My question then and now is, that is a remarkable change in the way we look at the economy if we expect the major economic actors, the largest corporations, not to act on essentially one criterion, profitability. If we take the view that corporations—and trying to make corporations national institutions again instead of international institutions is no small feat—but if we assume that they should pay attention to the concerns of the communities in which they locate operations and their workers, and on and on, how do we judge performance of the management of the Board of Directors? How do we hold them accountable? How do we govern corporations when there is this wide set of considerations in how corporations should behave and how their performance should be judged?

Dr. Russo.

Dr. RUSSO. I think it is a complicated question because we are really rethinking corporations because they have already rethought themselves. At an earlier period of time they did take into account multiple stakeholders in terms of their thinking, and some corporations still do that. But increasingly, as one executive said to me, "I want to do the right thing, but in this global competition now, I am going to have to move offshore. I am going to have to downsize."

And so the answers to the questions are really sort of systemic. How we look at global corporations in a global economy, how we define what they are as legal entities and their various responsibilities, how we judge their interactions with nation-states because

the nation-states provide a framework for their operations. And that is going to require a type of discussion that is going to include not only the United States but other countries. And a discussion about how do we hold these corporations responsible for their actions.

Chairman MILLER. Dr. Palley.

Dr. PALLEY. Thank you. This is a very deep question.

Chairman MILLER. Well, thank you.

Dr. PALLEY. I did read the transcript of the previous hearing, and Dr. Margaret Blair, who was at graduate school at Yale with me, was, I saw, a presenter, and she did, indeed, sort of point out how the right to be a corporation is, indeed, a legal privilege created by law. It is not something that exists naturally, and Dr. Blair also pointed out that, in fact, in current U.S. law there is nothing that says profit maximization is the only goal of corporations, though apparently there is one small State case regarding a bankruptcy when the firm was clearly going to be put into bankruptcy. At that stage it did seem to have an obligation to do best by shareholders.

I also want to reiterate what Dr. Russo said about, I have spoken to corporations, too, to corporate executives who say how they are trapped in this system, and that is when I used the word, this race to the bottom. I don't want it to be something, we are all going to end up impoverished here like in Bangladesh. That is not going to happen. We are a rich society, and we will continue to be rich. But whether we are as well off as we could be is a different question, and that is the sort of way in which I use it.

And lots of corporate executives, responsible corporate executives, would like to do better but are trapped in this situation. So we can truly help them.

One of our problems here is we tend to think of ourselves as engineers, as if we can engineer society. As an economist that is not in my frame of mind. I think getting good outcomes from the economy, from society, is extremely difficult. I would point to one thing, again, coming back to this issue of an architecture or think of an economy as a house. A well-designed house has doors, windows, ceilings, floors. You need all the pieces together to make a well-designed economy, and here is something of how we have hurt ourselves, I think.

I think of unions. Unions were a critical way of negotiating this difficult thing of getting corporations to behave responsibly. When there was a strong union movement in this country that was supported by public policy—not been now for close on 40 to 50 years—unions fought people within the corporation to get these other goals onto the corporate agenda. Once you drove unions out of existence—well, not out of existence, you drove them into a great state of weakness—you lost that form of representation.

And so today corporate governance has taken a different direction, and a very interesting study that I saw, although I don't actually have the citation here right now, is there were some economists who looked at pay of CEOs and the connection to union presence. And it turns out when unions are present, CEO overpayment is much, much less. So you do see not just representing workers, but unions bringing in other social interests, and this is done in a sort of a non-legislated way, and that is the sort of thing how Con-

gress with labor law can then have a knock-on effect in terms of good corporate governance in a way that one wouldn't anticipate.

Chairman MILLER. The presence of other CEOs on the Board's Compensation Committee also has a correlation to executive pay.

Dr. PALLEY. Yes, indeed.

Chairman MILLER. The results are much higher executive pay.

Mr. Rosen.

Mr. ROSEN. Mr. Chairman, if I could, I just want to come back again to some specifics to help you. You know, we talk about labor standards and environmental standards in other countries. We don't talk about them here in the United States, and this is something that could be done without legislation if we could kind of have a good seal of housekeeping for our companies. Which of our companies invest, how much do they invest in R&D as a share of their sales? How many of them provide pensions and health care to their people?

If we had this ranking, how much do they invest, reinvest their profits here in the United States, if there was an organization that would list these things, we would know who are the good companies, if you will. And then those companies would get some attention, maybe then people would invest in those companies.

So those are standards that we could do right now. We wouldn't need any additional legislation, but we are so busy talking about what others should do, we forget to see what we should be doing.

Chairman MILLER. How does that affect, Mr. Rosen, or any of you who've already answered this question, the large corporations are now not simply national entities in the way that General Motors was in the 1950s. They truly are international. Their investors are international, their markets are international, their operations are international.

What would investors in other countries think of a measure of a corporation that looked at how it, how well it was doing by people in our country?

Mr. ROSEN. The first thing I would say is that I know that in places like Germany and Japan it does affect their own investors to invest in those companies that they think are going to be loyal companies to their countries. We just don't have that kind of investment strategy. We don't encourage that kind of investment strategy, and in part because we don't have the information. So I think here in the United States we could influence the capital markets with that kind of information.

What would other investors in other countries think about it? I would imagine that they would like it because it would be providing more information to them also. You know, part of the problem right now is we don't get good information about these companies for investors, and that would help everyone. I think all investors around the world would appreciate it.

Chairman MILLER. Dr. Palley.

Dr. PALLEY. Yeah. Could I chime in there as well? This may be an anecdote, but it is a story that I heard that Ralph Nader actually wrote to the CEOs of the top 500 corporations in this country and asked if they could say the pledge of allegiance before their board meetings, and their response was, in fact, that, one I think wrote back that they might consider it. The other 499 said that

they couldn't because they had international shareholders, who obviously didn't share that same interest.

But I think that reveals something very important. I am all for standards, sunlight, exposure of what corporations are doing, but I don't think you will be able to escape the fact that at some level one will need powerful legislation and obligations of corporations imposed in part by law or through other actors in society who are powerful or remade powerful such as unions.

I do want to say that one very important thing here, I strongly disagree with Ms. Furchtgott-Roth's recommendations that we pass further trade agreements like the Columbian Trade Agreement. What is going on here is we are going down a road that locks us in and makes it more and more difficult to change direction. That is one of the consequences of building public policy in this piecemeal way.

And I am, therefore, a strong supporter of the idea of taking a pause in trade agreements, taking them off the table, beginning a period of powerful introspection, and we look at what things we can do alone, what things we can do with other countries, then work with those other countries to see who is on board for making changes. And to try and escape the path which we are currently locked into.

Chairman MILLER. Ms. Furchtgott-Roth.

Ms. FURCHTGOTT-ROTH. Well, thank you. Yes. Yes. Well, to answer your question about corporations, we need to make the United States a hospitable place to be so the corporations are attracted to the United States. We need to have low tax rates, low levels of regulation, low energy prices. After we passed the Sarbanes-Oxley Bill recently London has overtaken New York by some measures as a financial center, and we can't legislate that corporations stay here in our internationally mobile economy. But we can make it a hospitable place where corporations want to locate, where they can, where they provide jobs for Americans, where they provide low-cost goods, and that should be our goal.

Chairman MILLER. British law allows or requires an advisory vote by shareholders on executive compensation. The United States does not.

Do you believe that that would be an improvement?

Ms. FURCHTGOTT-ROTH. Could you repeat the question?

Chairman MILLER. Sure. You cited favorably Britain.

Ms. FURCHTGOTT-ROTH. Yeah.

Chairman MILLER. That some of our corporations were moving more operations to Britain.

Ms. FURCHTGOTT-ROTH. Yeah. Right.

Chairman MILLER. Britain requires a vote by shareholders at least on executive compensation packages. It is actually not entirely advisory. It is either approve or disapprove. The United States does not have anything like that.

Do you think that would be a useful reform in the United States?

Ms. FURCHTGOTT-ROTH. No, I don't think it would be.

THE DOD MODEL OF COMMUNITY ASSISTANCE

Chairman MILLER. Okay. The Department of Defense and their base closings took some great efforts to try to lessen the impact on

the communities that they were reducing or eliminating military operations in, closing bases. There have been some suggestions, and have for a long time, that American corporations should have to do the same thing.

Do you think something like that would be useful, and what form do you think it should take?

Mr. Rosen, you seem to be——

Mr. ROSEN. Yeah. Thank you very much. Here is a case where we have a positive model, and it works as you suggest. The question is why are we only letting a few communities take advantage of it and not others.

Let me just say I actually had the honor of having the opportunity to experiment with this program in a civilian case. I was working for Senator Bingaman, and the State of New Mexico was experiencing several dislocations because of the Levi Strauss plant closings. And we tried to emulate the base closing process in Roswell. We got one of their technical advisors transferred to Roswell to help with writing a strategic plan. We made up a community board just like they do under base closings, and it was pretty successful.

Now, of course, none of these efforts are ever going to make all of these workers whole again. We know that, but the question is, can we kind of ease the transition a little bit more, and the base closing model is a successful one. What makes it successful is that it is kind of aggressive, so they send expertise to the communities and help them figure out where they want to go.

Number two, they know about existing government programs. Not necessarily calling for more programs: They know where the grants and loan programs are, so they can help communities apply for those programs. That is the problem. A lot of communities and workers don't know about these things, but there are a lot of programs out there.

So that is the second thing that they do, and the third is it is very comprehensive. They look at everything. They look at the education system, the employment system, attracting new companies. They look at the whole thing. It is not just a worker adjustment program.

So those three elements make it very successful, and I, to be quite honest, just don't understand at this stage, when this program has been in place for several decades, why we don't use it in civilian cases. I just don't understand. It wouldn't be that costly. It is not a question of money because all it would be—funding, technical assistance—is already the existing loan and grant programs. So I don't think it is a matter of cost.

Chairman MILLER. My time is now expired.

Mr. Baird is recognized for five minutes.

TRADE ADJUSTMENT ASSISTANCE

Mr. BAIRD. I thank the Chair, and I thank our panelists. This is something tremendously important to my region. I have a county that is nearing nine percent unemployment, leading our state in that, and at least a significant portion we believe is because of competition from international trade.

One of the issues that many of us turn to when such events happen is Trade Adjustment Assistance, and Mr. Morgan, you have commented on the numbers of cases that have been filed and then denied and then litigated and then approved. Then you believe basically that DOL doesn't seem to be on the side—I don't mean to put words in your mouth, but as you read it, it sounds like their default answer tends to be no, and that leaves a whole lot of American workers bereft of the benefits that we created this program for.

Could you comment a little further on that? I have read your testimony; and any others who want to add to that, I would appreciate it. What is the situation, and what do we need to do to improve it?

Mr. MORGAN. I think you are exactly right, that the problem is that the Department's default answer is no. Now, they would surely come back and say that they certify workers in a lot of cases, but I think that what they are doing is certifying workers where the petition presents such a compelling, straightforward case that they don't have to conduct any kind of an investigation. The cases where they are denying relief and then going into Court and defending that decision, they have conducted the scantest of investigations.

And just to kind of compare, I do a lot of work at the International Trade Commission and the Department of Commerce, the International Trade Administration. The agency records in those cases are always going to be far more extensive, but I have never seen a case where one of those agencies tried to defend the decision on a few e-mails and a few voicemails. And I think what it is going to require from Congress is to bring the agency in and to ask them and to hold them accountable for the fact that they are not conducting the kind of investigation. I mean, the Congress has given the agency subpoena authority to produce documents and witnesses. I have never seen that level of concern in these investigations. And then when they go into Court, and I think a lot of agencies do tend to do this, they reflexively try to defend the decision that they reached in the first instance.

But in the other agencies I practice in front of, those are adversarial proceedings where the parties have hired lawyers and have had full representation throughout the administrative process. And the agency in those cases does not have some kind of protective interest towards one side or the other. They are supposed to administer and enforce the law. In Labor cases, they are supposed to be acting with the interest of the workers in mind, and the workers don't have counsel, especially at the agency level.

So I think that they are just completely acting in disregard of the Congressional mandate to protect the workers.

Mr. BAIRD. And Mr. Rosen, please.

Mr. ROSEN. Congressman Baird, I just want to add I always think it is important to put all of this in context. I think Mr. Morgan has set out really excellently the problem. Just some numbers.

Every year the Department of Labor receives approximately 3,000 petitions for Trade Adjustment Assistance. They certify approximately 2,000 of those petitions. As he suggests, some of them are very slam dunk, they are very easy, and 1,000 of them get de-

nied. For whatever reason—legitimate, mistake on the form, whatever reason—1,000. As Mr. Morgan pointed out, only 12 of those 1,000 are even appealed. People don't understand how to do it. It is a very arduous process.

So let us make sure we understand. I mean, there are egregious problems with the appeal process, but it is only affecting a minority of a minority of people. And I just want to give you one example.

I run a non-profit organization that helps workers navigate through the program. We finally set up this organization because the Labor Department wasn't doing it. This is a true story. I received a phone call yesterday from a gentleman in Indiana. He missed the orientation meeting at the one-stop, and the state denied him assistance.

Now, how is that a way to run a dislocated worker assistance program, let alone a trade policy, in which Trade Adjustment Assistance is at the center of that trade policy? Because the guy missed the meeting.

So we really have got to rethink this whole thing. I mean, we have got serious problems, and I have studied this program for 25, 30 years. I have to say that it is not a partisan issue. It is not a partisan issue, and I think part of the problem is because the Labor Department doesn't like running targeted programs. They would much rather run a general program because it is much more cost effective to do that.

I don't know the numbers, but I think that there are probably more people at the Department of Labor working on Trade Adjustment Assistance than there are working on unemployment insurance because it is such a highly bureaucratic program.

So on the one hand I kind of understand the problem at the Department of Labor, but that is not the fault of the workers who need the assistance.

Mr. BAIRD. Any others want to comment on that from your experience?

Ms. MOORE. I would like to share that when we were working with the folks from Pillowtex, we had roughly 1,000 of the 4,900 that were affected in the state who just fell off the map. We never heard from them, we never got any response from them. The system itself was so complicated and so overwhelming that it was not unusual when we were in the rapid response meetings for workers to literally get up, walk out, and just drop the materials in the trash can because they didn't have any way of understanding. When you are talking about an illiteracy rate of 46 percent, you hand people a stack of materials like this that they are supposed to go through and navigate and understand and complete, it was just impossible.

So it is a very user unfriendly application process.

Mr. BAIRD. Very helpful because, you know, many of us who believe that trade has—my state in particular is the most trade-dependent state per capita in the country, Washington State with Boeing and Microsoft and Weyerhaeuser and all the grain and what not that goes through Washington. And so we in many ways benefit from trade, but at the same time, as I mentioned, I have got workers who have lost their jobs I think directly related to

trade, and one of the things those of us who try to support responsible trade policies do is we look at TAA to sort of buffer that.

But from what you are saying at multiple levels along the way that imagined buffer may break down, both in terms of the application for the eligibility itself or for the initial job loss and then for the workers who then apply and may, if they miss a meeting, lose their eligibility, but also they come to the meeting, and they just get overwhelmed by the bureaucracy.

I think, Mr. Chairman, one thing we might want to do both on this committee and more broadly in the Congress, is look at that. I have some more questions I would be happy to ask but I know my five minutes is up. So——

Chairman MILLER. Mr. Baird, I went over five minutes a little bit myself. If you would like to continue, you may.

THE SERVICE INDUSTRY AND TRADE ADJUSTMENT ASSISTANCE

Mr. BAIRD. If that is the case, then I am particularly interested in issues of service jobs, and how that relates to TAA and also to trade. I founded in this Congress the Career and Technical Education Caucus, and I believe we don't do enough on career and tech ed. Part of the reason I did that was I think it is harder sometimes to export some of those jobs. We are going to be needing plumbers, and it is hard to outsource a plumber.

But a lot of our service jobs, which many of us have sort of told people, "Boy, that is the area where you can strike it rich and make big money," et cetera, those things are getting more and more outsourced.

And I wonder if any of you have comments on pros and cons and how we help deal with that potential job loss related to trade.

Dr. RUSSO. I think it is a great question, and I guess more or less my role here partly is to give sort of a historical sort of background on this.

When the dislocations were going on in Youngstown among steelworkers, nobody really gave a damn because those were blue collar workers. Okay. This was all part of the natural economic order, "creative destruction." All the usual sort of ideas of a traditional economic theory.

And like you said, people were promised new future jobs. They would go into computer repair. That was a short-term solution because you just slipped in a new piece of equipment.

But what happened is that in the 1990s, especially in Ohio, we started to see the outsourcing of service jobs. Middle class white collar jobs, not middle class blue collar jobs, and then somebody kept coming back to Youngstown and saying, "Well, did you guys ever recover?" And the answer is, no, but they were being told the same thing that our communities were told in the 1980s.

We jump forward to today, and you can see a tidal wave of this information, as I said in my remarks. There is a growing politics of resentment. I sense that they don't trust anybody, because these platitudes, these jobs they are being trained for, their experience with trade adjustment, knowing full well that often these jobs would be outsourced more quickly.

How much productivity can we educate into a worker that is going to offset a job in China that can be done with five people making 50 cents an hour?

I will repeat what I said in my remarks. These are systemic discussions, systemic resolutions, and with no disrespect to my colleagues here, they are talking about trade adjustment, they are talking about community college and retraining. I think in the lack of the Department of Labor, which you are absolutely right to talk about, who more or less cover the getaway for corporations who now have a policy to move work increasingly to the areas that have the lowest wages.

So to get back to your point, this situation is not going away, and it is only being exacerbated by what is happening today.

Mr. ROSEN. Yes, Mr. Congressman. When I started my career about 25, 30 years ago, the growth industry was trying to calculate how many workers were losing their jobs in manufacturing because of trade. The growth industry now is trying to calculate how many service workers are going to lose their jobs because of globalization. It is not an easy thing to do, and there are a lot of people that are doing it, coming up with enormous numbers.

The problem is, I think the reason it is getting attention is because our policy infrastructure hasn't caught up with the economic reality. So, for example, we have this Trade Adjustment Assistance Program, with all of its problems. But I will give you another case in point, because I think it is always important to talk about the specifics.

There was a very major case in your state that was taken to the Court of International Trade because the workers made software, and the Department of Labor did not give them eligibility. And then finally the case was argued in the Court, and they said, "Well, because the software is put on a CD, then we can consider the CD a product. But otherwise we can't."

I mean, who draws these lines? The persons who do software that isn't put on a CD still experience job loss the same way as the worker who provides it, when it does come on a CD. So this kind of problem is, like I said, it is our infrastructure having a hard time catching up to the economic reality.

Thus, the House of Representatives has passed a Trade Adjustment Assistance Bill that expands TAA to services. Now, it is going to cost some money. I am sorry. It is just the reality of it. And so we are trying to come up with ways to be able to target the program to really help those people in need. Granted, some of the service workers have higher education, have more background, they may not need the same kind of assistance as others. But we should get around this discrimination and at least try to deal with the problem before it comes and it bites us.

And I just want to repeat something I said in my statement, which is this is all important because we want to help workers in need. Clearly. But I believe that this frustration is starting to infiltrate our ability to make economic policy. We are not able to move forward on trade policy, we are not able to move forward on policies that will create economic change. Greenhouse gas emissions. People are talking about what kind of dislocations is that going to create. If we had in place a structure that helped everyone equally,

adequately, then we might be able to move forward on some of these economic policies more efficiently.

CHALLENGES AND LESSONS FOR COMMUNITY COLLEGES

Chairman MILLER. Thank you, Mr. Baird.

Ms. Moore, I get homesick sometimes, so I just wanted to hear you talk a little bit more. The period from 2001 to 2005, was the worst four-year period of job loss since the 1930s, since the Great Depression in North Carolina. We lost 167,000 manufacturing jobs, which is almost a quarter of the state's manufacturing jobs.

Our community college system is one of the best in the Nation, the third largest. Thank you, Terry Sanford. And unlike many states where the community college system essentially began as an academic program, ours has much more of a history of job training, being very specifically targeted to economic skills.

But for a lot of community colleges the need was overwhelming. Obviously no place more than Kannapolis, but Dr. Russo talked about in Youngstown workers getting training in refrigeration when there are no refrigeration jobs. The part of my district that is probably closest to the kind of job loss you have suffered in Kannapolis is Rockingham County, north of Greensboro. Eden, Reidsville. We probably had the second largest number of Pillowtex jobs all lost on that same day.

And I have certainly heard there of displaced workers wondering whether the programs they were taking at the community colleges under TAA matched up to any jobs that were going to be available to them.

What kind of challenges has the community college system from North Carolina as a whole faced during this last few years, this last decade, and what lessons can we learn from the experience of the whole community college system?

Ms. MOORE. I believe that for us at Rowan-Cabarrus Community College, and I think Rockingham experienced a similar dynamic, we saw our displaced Pillowtex workers going into trade programs that previously had been under-enrolled. These were previously under-enrolled.

Chairman MILLER. Okay.

Ms. MOORE. They were programs that literally were dying on the vine as Dr. Russo made reference to the blue collar jobs. Many folks were migrating away from those, because they didn't believe that they could make a sustainable living in those kinds of work environments. So the Pillowtex phenomena actually gave us at the college an opportunity to revitalize some of those trade programs and technical programs.

These were programs where we were hearing from local employers we were not producing enough graduates. We weren't producing enough machinists, enough welders, enough auto technicians. So that healthy boost and the heating and refrigeration. The Charlotte market, which, of course, is 40 miles south of us, absorbed many of those folks into jobs that were applicable to those trade programs.

But I hear and I know it is a very deep concern of our new system office president, that there are programs throughout the state in community colleges that are closing because of a lack of enroll-

ment. So there is a skilled labor shortage. We have programs that address those skilled labor needs, however, because of not being able to get people into those programs or to keep up with the technology that is out there in those service sectors, we are struggling to maintain those programs in the State of North Carolina.

Dr. RUSSO. May I respond to that also?

Chairman MILLER. Dr. Russo.

Dr. RUSSO. Because the experience in Ohio is pretty similar to that. Let me give you some examples. In the 1990s I was asked to do a research project for the Western Reserve Building Trades Association, which is the contractors and the unions in northeast Ohio, and what was happening to their particular industry 15 years into the de-industrialization that was going on. And what I saw was union contracts that were only on paper alone. Everybody was signing what were called project agreements that had lower wage levels. And when I asked about this, they were, we were told that it was the result of all the ex-steelworkers that were going into construction. In other words, anybody who had a pick-up truck and a tool box went into construction, became part of the underground economy. They became low-wage workers, they lowered the scales of unionized workers that are plumbers.

Meanwhile in that industry itself that workforce was graying, and there was a lot of intergenerational work in the construction industry, and people were not going into construction, the children of these construction workers, because employment had become episodic.

And so the de-industrialization process does not only impact the particular industry, but it also impacts a set of subsidiary industries in lowering their wages and benefits, and then you have, at the same time you have workers who may have been making a manufacturing wage, are being asked to take service jobs. As one steelworker said to me, "You know, I went from working the MacDonald's Steel to McDonald's hamburgers." And what happened? The wages dropped dramatically, and they had to struggle to survive.

An earlier question that you had about the experience of these working people and what you rightly, you know, suggested is that they disappear because of the emotional, the economic conditions that they experience at the time of that unemployment. And it is hard for people to understand, they can't concentrate if they wanted to, there is economic necessity, there is a whole set of pathological problems that become associated with the unemployment, and they disappear. Out of sight, out of mind.

Mr. ROSEN. Just very quickly a problem that the community colleges face and that is capacity. As you yourself mentioned, here Kannapolis experiences this enormous number of layoffs, but had not done that in 20, 30 years. So there is a community college that is based on a certain number of enrollment, and then all of a sudden their enrollment goes up by three or four or five times, and the community college is being asked to respond to it immediately. So there is a capacity problem of just basically room, furniture, equipment, teachers, and that has to be done immediately and in part because for economic reasons it should be done immediately, but

also because our programs are geared such that you got to be through them in, within a certain amount of time.

So that is a real problem that the community colleges face, and that is something that we need to respond to. Now, let me just say that in the Trade Adjustment Assistance legislation that is being considered, there is some thought about the possibility of a grant program for community colleges, because this isn't something that everyone is going to, every college is going to experience all at the same time, but different colleges are going to experience at different times. And there is an example of something that could be done to really help the problem.

Chairman MILLER. Ms. Moore.

Ms. MOORE. I would like to also add one of the issues that we faced in absorbing so many adult workers was the remedial needs of those folks in terms of not only English and math, but technical issues. Because you can't take an English class, very few classes can you take at a community college anymore where you are not required to have some computer application skills. You have to be able to apply online, you have to be able to register online, you have to be able to complete a research paper or report using a computer and a flash drive. These were foreign elements to this workforce. So you have that whole issue of remediating the adults so that they can compete in the same classes as recent high school graduates who come to us with those skills.

THE EMOTIONAL COST OF DE-INDUSTRIALIZATION

So that is another burden.

Chairman MILLER. In most of rural North Carolina the, and it is actually some community colleges that maintain these statistics, the percentage of the adult population that does not have a high school diploma or GED is typically in the high 20s or even in the 30s, and for those folks to lose their jobs in their 40s or their 50s, and to be too old to work and too young to die, it is pretty hard to go back to school.

Ms. Moore, Dr. Russo talked about the emotional toll that displacement took on people, how it is hard to concentrate, hard to concentrate, hard to do what needed to be done next to create a new economic future for yourself.

Have you observed those kinds of difficulties with displaced workers, and what suggestions do you have for community colleges or the communities that put, that find themselves in a similar circumstance in the future?

Ms. MOORE. We certainly experienced that in a very big way with Pillowtex, and we continue to experience it with the ongoing dislocations that we have. When folks are traumatized, it was almost like seeing folks suffering post-traumatic stress syndrome, because they had lost their livelihood and as I alluded earlier, many were multi-generations within the same family, so son and daughter couldn't go live with mom and dad, mom and dad couldn't go live with son and daughter because they were all impacted by the same plant closing.

The emotional attachment that people felt to that way of life and to that industry persisted for a number of years, and I think there are still elements within our community who believe that there will

be some semblance of Pillowtex that resurrects itself on the research campus, because that is what they see as that site, and it was there 116 years and sustained many of them and their families, and they think it will come back in some way, shape, or form.

One of the real issues that we had was that our own faculty and staff who were dealing with these dislocated adults did not have any previous kind of training or experience that prepared them to talk with these folks and counsel them and advise them. Our partners, our Job Link partners came together. We tried to work as cohesively as we could. One of the issues with the influx that we had were that the local employment security commissions hired a lot of intermittent workers. These were workers who were as unfamiliar with trade policies as the community college folks were. So we were educating ourselves not only on the policies, but also on the emotional issues that these folks were coming to us. If someone came in, they were about to be evicted because they just couldn't pay their power bill, we had to figure out a way to find them some kind of resources. Had one gentleman who came to us who was reluctant to go out and look for a job because he had a mouthful of teeth that were in very, very bad condition, and he had no dental insurance and no way of getting those treatments. We had people that were suffering from pre-existing medical conditions who needed surgeries that had been scheduled, and they no longer had an insurance provider to do that. And then they were being told, well, you have to be enrolled in school, and you have to be enrolled within X period of time or you are going to lose your extended unemployment.

So there was a lot of trauma that was going on, a lot of really, really difficult human decisions that were having to be made with a very limited professional level of guidance and counseling resources available to them.

Dr. RUSSO. I want to just add to that story but not to the workers but to the mental health workers. One thing we write out in our book, *Steeltown USA,* is the case of Parkview Counseling Center in the 1980s, where they were having employment problems. I came in there to see what the employment problems, we did a needs assessment, and then we interviewed all the psychologists. And I remember going back to the meeting with about 40 psychologists and about 50 staff and saying to them what they needed to do was group therapy. And that was interesting to tell a group of therapists they needed group therapy, but what was happening to them is that they were suddenly handling this influx of mental health cases that were not the usual marital disputes. It is hello, I am going to kill myself, I want to kill my kid, you know, and having all sorts of problems. And there was an overload of, their caseloads exploded without any additional resources. In fact, as the community downsized, the amount of money that came into these mental health institutions was decreased because it was based on a per capita formula. So the mental health workers, the caseworkers in those institutions were overwhelmed by this de-industrialization. It was another part of the story. It wasn't just the actual workers or the university, but it was also the mental health caseworkers who had to deal with this fallout from de-industrialization.

Chairman MILLER. My time has expired, and speaking of psychologists, the Chair now recognizes Mr. Baird.

Mr. BAIRD. Thank you. He meant that because I am one, not because I need one, although not everybody else will be——

Chairman MILLER. The two are not inconsistent.

PART-TIME TRAINING AND TAA

Mr. BAIRD. Exactly right. I am interested in the issue of—one of the things we discovered in my district was paradoxically in normal student loans, part-time students are not eligible for student loans. It seems to be, it really doesn't make any sense, and we actually have some legislation that we have introduced to try to fix that.

How does TAA assistance relate to part-time students?

Mr. ROSEN. Mr. Congressman, that has also been a problem in Trade Adjustment Assistance. You must, currently you must be enrolled in full-time training in order to receive the assistance. Again, the piece of legislation that was passed by the House and is currently being considered in the Senate would address that problem and try to deal with the part-time issue.

It would also, because this came up earlier let me just take this opportunity to say, try to address this issue of self-employed. I mean, currently you can't get assistance if you are going to be self-employed. So, there is an attempt to try to do it. All of these things are not so easy. We don't do it because they are, we just decide not to do it. It is just hard to do these things, but, you know, people have to come together and try to come up with solutions.

The part-time work is a problem because people can't afford——

Mr. BAIRD. Right.

Mr. ROSEN.—to just stop everything and take training. I mean, we here in Washington come up with these great ideas, but the reality is that these people just can't do that. So hopefully if this legislation passed, and I think you all know that there are a lot of hurdles before this legislation, if it does pass, it will be an attempt to try to address that.

But I also want to make one comment on what Ms. Furchtgott-Roth mentioned about the non-high school or the high school dropouts. This is a very serious issue. By my calculation there are 50 million people in this country that do not have a high school degree or a GED equivalent. Fifty million. And yet we come up with all of these programs for college-bound students. Why don't we make those programs available to those 50 million, or why can't we say that as a nation within the next 10 years we are going to make an objective that no one in this country will not have either a high school degree or a GED equivalent, and let us put in some of those resources that we devote to college-bound students to making sure that every student in this country gets a GED or a high school equivalent?

And, again, currently that is problematic in TAA because Trade Adjustment Assistance is not theoretically supposed to take care of, it is not supposed to finance degree programs, only vocational programs. So that is something that we also have to address.

But these are all the things that I brought up before. This is the infrastructure catching up with the economic reality, and we have to really do that aggressively.

Mr. BAIRD. I think those are very insightful comments, and I appreciate the information on the part time. It just made no sense to me that people are saying if I didn't need the loan or didn't need the TAA, if I had a full-time job, or if I had the time, I would go full time, but I don't have the time because I have to work. I need the money because I have to work. I mean, and we rule those folks out. It is kind of——

Mr. ROSEN. Excuse me, Mr. Congressman, if I could just say one other thing.

Mr. BAIRD. Yes.

Mr. ROSEN. I have been down in Kannapolis interviewing workers down there to see, going through the program. Some of them said to me, you know, you have got this wonderful program, money and training and all this. I don't want it. I don't need it. All I need is the health coverage tax credit. I just want some assistance keeping my health care, but we don't allow them to do it. They have to take the whole package or nothing.

I mean, there is another basic thing, and there it would be so much more cost effective if we allowed people a menu and let them pick and choose what they wanted instead of us putting them into some system where they have to take it all or leave it.

Mr. BAIRD. Is that in your testimony, Mr. Rosen? I don't know if it is.

Mr. ROSEN. In my written testimony.

SUPPORTING AND DEVELOPING A HEALTHY WORKFORCE

Mr. BAIRD. Okay. Thank you.

I just had dinner over the break or over the weekend with one of our employers at a shipyard, and I asked him, you know, how is business and what are your challenges? And I hear this from every employer I talk to. It is paradoxical given the topic here today. And the number one challenge is finding good workers, finding people who will show up on time, pass the drug test, do the work, and stick with it is a nightmarish challenge for employers, who are honest, who don't steal, et cetera. Now, I am not trying to disparage the majority of American workers, because I think most of the people are hardworking, play by the rules, and are decent folks.

But from the employers I have talked to, finding people who will do the job and have the skills is a real challenge, which prompts me to think out loud a little bit. The paradox at TAA is we are saying, "Okay, so after you have got your job we are going to try to train you up for a new job."

What I don't know is to what extent that issue is contributing to the outsourcing of jobs, that issue of difficulty finding workers. I think it is significant from employers I talked to. They many times are willing to pay fairly good wages and good benefits, but if they can't find the workers and somebody else does have them, you are going to go there.

One thought I had, and I don't know if this makes sense, but so let us suppose I am an employer, and I am faced with some difficult financial decisions, and either I may offshore my work, you know, I may keep the business running but offshore it and thereby close down a factory or mill or something in my district. Or I

maybe just be going to go under because somebody else somewhere else is making—and the business is going to belly up, in which case, either way I lose local jobs.

Is there any way that those folks can come forward and say, "Look, I am about to go under and dump about 300 workers onto your TAA rolls at a cost of X. If you just give me X in some fashion, I can keep my business open, and you don't have to spend it on TAA." I don't think there is any way that I know of, but it sure makes a lot of sense to me. Or give me X minus 10 percent.

I, you know, it makes sense to me that we ought to find some way sort of pre-TAA to do TAA. I don't know how to work it, but I would rather see people continue to work, the jobs continue, because once you shut these mills down, they are done. You know, it gets turned into condos or scrapped out as scrap metal, and the jobs, the expertise goes. I mean, I don't know if there is a way to do it, but any thoughts on that?

Mr. ROSEN. Congressman, I mentioned in my oral statement that there are currently two programs; the Manufacturing Extension Partnership that provides technical assistance.

Mr. BAIRD. I haven't been greatly impressed by that in my experience.

Mr. ROSEN. And the second is the Trade Adjustment Assistance for Firms Program, which I know also has a center in Washington State. Now, in the history of the firms of the TAA for Firms Program, actually when it was started in 1974, and into the 1980s, there, it provided technical assistance, but there also was a loan guarantee part of that program. In the early '80s that was removed. Maybe that decision needs to be revisited. But right now those two programs provide only technical assistance and no financial assistance.

But those kinds of programs should be studied and possibly expanded if they can, you know, if they can prevent those kinds of occurrences from happening. But the financial side is a totally separate thing.

Ms. FURCHTGOTT-ROTH. The problem is it is something that economists call moral hazard, where if firms were allowed to do that, then they would say, some of them, not all of them, would say they were going under in order to get grants from the state or the Federal Government. So that is one barrier to putting these things into place.

About your employer in Washington State who can't find enough workers, you do see this in many parts of the country. You see some places that have a lot of workers and others that don't have enough, and if one could somehow encourage mobility of people, and a lot of times people in communities just don't want to leave, but if they could somehow be persuaded to leave and there are jobs elsewhere, if you look at the auto industries, for example, in Michigan versus auto plants in Alabama. There is a great deal of demand in Alabama, and there are unemployed workers in Michigan. So if we could figure out some way to transition into other parts of the country, perhaps with grants or with wage substitution programs, then that might be helpful.

Dr. RUSSO. I think another sort of way to look at this discussion in trying to follow up with what Dr. Palley talked about is about

the race to the bottom, and I will give you another kind of concrete example.

There is an automobile supplier in our area that is now, has a low wage, can pay $10 an hour, and they are making wiring harnesses. Okay. Our local paper just reported that they are losing anywhere from 12 to 15 workers a month. They are rolling over the workforce.

Now, you can do that in a grocery store, but if you are making wiring harnesses for an automobile, there is going to be problems down the road with the wiring harnesses in your car, because the wages are dropping to such levels that people won't take those jobs. Or if they do take those jobs, their relationship to that job is very tenuous at best.

And so I think part of this larger question is about this race to the bottom that is occurring as a result of this. It is increasing steadily, not just in terms of the wage rates itself but the, now the shifting of risks to employees in terms of health care, pensions, et cetera, which makes it very difficult.

Those workers that are making the $10 an hour, they are not getting health care. Okay. And so if they can shift between jobs at that $8 to $12-an-hour range. That is $24,000 at the high point there. And if you have to buy health insurance, the disposal income is enormously low.

So I think you are going to have a lot of that. I think you are going to have a lot of turnover in the workforce. Some people praise that. Some people think that that is disastrous, not only in terms of the individual but in terms of product in the long run.

HEALTH CARE COSTS

Mr. BAIRD. Do we have some figures in terms of what the average cost per employee, the average net cost, I mean, I am assuming, so not just the TAA expenditures but health care, you know, let us suppose you got an employee who is, who becomes eligible for TAA. And so they have lost their job, they have lost their health care, and they are going to get subsidized there possibly, who knows what.

Has somebody done the math, some sharp economist and said, so, you know, this is what they would be eligible for TAA, this is what their health care costs are?

Mr. ROSEN. Well, I am not sure this is exactly what you are looking for, and I am certainly not a bright economist, but look at the amount of money spent on Trade Adjustment Assistance per person, and that comes out to about $15,000. Now that includes the extended unemployment insurance payments for probably about a year because that is the average of what people are taking, plus the training, plus there is a wage insurance program, plus the health coverage tax credit. This doesn't tell me the out-of-pocket expenses of the worker.

Mr. BAIRD. Okay.

Mr. ROSEN. But the amount that we are—the 65 percent that the Federal Government is paying. So that is about $15,000 as opposed to under the WIA Program, the *Workforce Investment Act,* which is the general training program for all dislocated workers, is $600. Six hundred dollars, I shouldn't say it, because we have, I have an

expert sitting next to me, at a community college that doesn't probably even pay for one single course.

So that is what we pay on average for WIA and on the other hand we pay $15,000, and it is a high number because that includes the income maintenance payments under Trade Adjustment Assistance.

Mr. BAIRD. Appreciate the insightful comments.

Mr. Chairman, I have another appointment, but I appreciate you calling this hearing, and thanks to our witnesses.

Chairman MILLER. Thank you, and we are at the end of the time that we have scheduled for hearing. I have hours more questions prepared by the Subcommittee's able staff, not to mention the questions that would spring from my own brain, which are usually a nightmare for the staff. But I appreciate all of you being here. This obviously is a hugely important topic that will be with us for a long time.

Thank you all for appearing before the Subcommittee this afternoon, and under the rules of the Committee the record will be held open for two weeks for Members to submit additional statements and any additional questions they might have for the witnesses, which can be answered in writing, of course.

And the hearing is now adjourned. Thank you very much.

[Whereupon, at 3:10 p.m., the Subcommittee was adjourned.]

Appendix:

Additional Material for the Record

THE GLOBALIZATION OF R&D AND INNOVATION: SCALE, DRIVERS, CONSEQUENCES, AND POLICY OPTIONS

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The Globalization of R&D and Innovation: Scale, Drivers, Consequences, and Policy Options

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Introduction

During the 110th Congress, the Committee on Science and Technology launched a major initiative directed at better understanding the globalization of research and development (R&D) and innovation. Four hearings, entitled, *"The Globalization of R&D and Innovation,"* were convened to explore the scale, drivers, and consequences of the movement of science, technology, engineering, and mathematics (STEM) jobs and facilities to foreign countries. The hearings focused on four themes: the expected economic and technology impacts of globalization; the higher education response; the factors that attract R&D facilities to particular locations; and the impacts on the science and engineering workforce. Expert witnesses the magnitude of globalization, its causes, the expected impacts on the U.S., and the implications for policy.

The globalization of R&D and innovation is a significant emerging phenomenon that will change how America captures the downstream benefits—such as high-wage jobs and technological superiority—of its investments in innovation and R&D. In addition, the rise of sovereign wealth funds formed by countries interested in access to intellectual property and intellectual capital from American companies adds a new dimension to these questions. These changes require new directions in U.S. innovation policy.

This report, compiled by the staff of the Committee on Science and Technology, will summarize the findings from the series of hearings and present policy recommendations for the Congress to address the mounting challenges of the globalization of R&D and innovation to America's economy and workforce.

Background

One of the new aspects of globalization is that a larger scale and scope of jobs have become newly tradable and those jobs are increasingly vulnerable to offshoring. Economists estimate that a large share of American science, technology, engineering, and mathematics (STEM) jobs is vulnerable to offshoring. Vulnerability does not mean that all of these jobs will be lost. It does mean that

many more jobs will be subject to wage pressures from workers in low-cost countries as those countries actively pursue those industries. Witnesses at the Committee's four hearings provided estimates of expected vulnerability and examples of jobs and operations that have already moved offshore. However, without better tracking of these transfers, it is difficult to analyze the likely impacts of the types and numbers of jobs moving offshore.

Some major U.S. universities have responded to globalization by building branch campuses abroad and establishing joint ventures with foreign universities. There are no good estimates of the scale and scope of all of these ventures, but they appear to be relatively small to date. However, experts agreed that many major U.S. universities are exploring ways to significantly expand abroad, particularly in low-cost countries. The decision-making process and criteria are unique to each university but two primary purposes underlie the moves: serving a rapidly expanding population of foreign students who would not come to the U.S. and many of whom have job opportunities at multi-national companies operating in their home countries; and, offering opportunities for their U.S. students a more international experience through study abroad and for faculty more international collaboration.

There are both positive and negative economic effects from globalization, but witnesses disagreed about the net effects, particularly in the long-term. Three views about the impacts of globalization emerged from the hearings. One view is that globalization is very beneficial to the U.S. and any resulting disruptions—such as job loss caused by offshoring and trade—are small, mostly benign, and can easily be addressed without significant policy change. Another view is that globalization will be beneficial to the U.S. in the long run, but the disruptions caused by offshoring will be considerable and require significant changes in policy, particularly in the social safety net for those who are disadvantaged. The final view is that globalization is harmful to the U.S. economy in the long-term. This view draws a distinction between free trade and shifts in productive capacity between countries. Current globalization trends are mainly comprised of shifts in productive capacity and can be harmful to the country that is moving its productive capabilities abroad.

Another new phenomenon is competition by low-cost countries for R&D facility sites. Other countries are targeting R&D and innovation facilities and are increasingly successful. The criteria companies use for locating R&D facilities are multifaceted, including lower costs, talent, and government subsidies and incentives. Witnesses also pointed out that some governments are requiring companies to place R&D facilities and transfer technologies as a condition of market access.

The witnesses also testified that domestic and foreign firms are building up significant levels of STEM workforce capacity in low-cost countries. Some of these workers will complement American STEM workers while others will use workers in low-cost countries as substitutes. Identifying precisely how many workers are being displaced remains difficult, but a significant share of foreign workers are substituting for U.S. STEM workers.

Summary of Hearings

On June 12, 2007, House Science and Technology Committee Chairman Bart Gordon chaired the first hearing on the globalization of innovation and R&D. The hearing explored the implications of this trend on the U.S. workforce, the U.S. science and engineering education pipeline, competitiveness, economic growth, and America's innovation system.

The hearing witnesses were: Dr. Alan S. Blinder, Professor of Economics at Princeton University, Director of Princeton's Center for Economic Policy Studies, and Vice Chairman of the Board of Governors of the Federal Reserve System from June 1994 until January 1996; Dr. Ralph E. Gomory, President of the Alfred P. Sloan Foundation and Director of Research at IBM Corporation from 1970 to 1986; Dr. Martin N. Baily, senior fellow at the Peterson Institute for International Economics, senior adviser to McKinsey Global Institute and Chair of the President's Council of Economic Advisers from 1999 to 2001; and, Dr. Thomas J. Duesterberg, President and CEO of the Manufacturers Alliance/MAPI.

The witnesses discussed the implications of the globalization of innovation and R&D. They concluded that an increasing share of innovation and R&D work is being offshored but differed on the long-term implications to the U.S. They also pointed out that innovation is much broader than just formal R&D activities and cautioned that tracking the trends as well as policy remedies should not be too narrowly focused on formal R&D. While the witnesses provided a variety of policy recommendations, they concurred that significant policy responses are needed. They also concurred that passage of the *America COMPETES Act* (P.L. 110–69) was an important and significant first step in ensuring America benefits from the globalization of R&D and innovation.

On July 26, 2007, Chairman Brian Baird of the Subcommittee on Research and Science Education held the second Full Committee hearing on the globalization of innovation and R&D, which explored how globalization affects America's universities. The U.S. higher education system is a principal source of America's preeminence in STEM fields. As STEM offshoring increases competition for U.S. STEM workers, universities are responding by modifying their curricula to help their STEM students better compete. Globalization also enables American universities to venture abroad and build programs and campuses overseas to serve the growing demand of foreign STEM students. The hearing explored the internationalization of American universities and the implications for America's competitiveness.

The hearing witnesses were: Dr. David J. Skorton, President of Cornell University; Dr. Gary Schuster, Provost and Vice President for Academic Affairs of Georgia Institute of Technology; Mr. Mark Wessel, Dean of the H. John Heinz III School of Public Policy and Management at Carnegie Mellon University; and Dr. Philip Altbach, Director of the Center for International Higher Education and J. Donald Monan Professor of Higher Education at Boston College.

The witnesses provided expert opinions on the university response to the globalization of innovation and R&D. They concurred that the American higher education system is the envy of the rest

of the world, conveying a special advantage to America particularly in STEM fields. However, they emphasized that other countries have recognized the importance of higher education in fostering innovation and have begun to invest heavily in their higher education systems. The witnesses also testified American universities have begun establishing campuses abroad, and said that this emerging phenomenon is likely to reshape the nature of the American higher education system.

There are no good data on the scale of university presence abroad but the witnesses agreed that establishing a substantial presence abroad is part of the strategic plan of nearly every major research university. Because the trend is so new, the witnesses could only speculate on how this might affect the U.S. innovation and STEM workers but they all believed that the positives would outweigh the negatives. They asserted that for American universities to remain the best in the world, they must be able to attract the best faculty and students regardless of national origins.

Dean Wessel acknowledged a potential downside of the globalization of higher education, saying, "As universities become more global, we are effectively, if unintentionally, increasing the capacity of firms and individuals abroad, to do jobs currently done here in the United States." He then went on to say that he believed that this problem would be small and would be easily outweighed by its benefits. The witnesses only vaguely described their efforts to improve their curricula to improve the competitiveness of U.S. STEM students. This latter activity seems to be subsumed by the universities interests in expanding foreign presence.

On October 4, 2007, Chairman David Wu of the Subcommittee on Technology and Innovation held the third hearing on the globalization of innovation and R&D. This hearing which explored the factors companies use to locate their research and development (R&D) and science, technology, and engineering intensive facilities. Witnesses discussed the policies other countries use to attract such facilities, and how to make the U.S. more attractive to companies. Firms now have many options around the globe when deciding where to locate R&D, design, and production facilities. This hearing explored the trends in, and factors for, site selections for science, technology, and engineering intensive facilities and the policies needed to ensure that the U.S. remains attractive for these investments.

The hearing witnesses were: Dr. Martin Kenney, Professor of Human and Community Development at University of California, Davis, and Senior Project Director at the Berkeley Roundtable on the International Economy, University of California, Berkeley; Mr. Mark M. Sweeney, Senior Principal in McCallum Sweeney Consulting, a site selection consulting firm; Dr. Robert D. Atkinson, President of the Information Technology and Innovation Foundation; Mr. Steve Morris, Executive Director of the Open Technology Business Center; and, Dr. Jerry Thursby, Ernest Scheller, Jr. Chair in Innovation, Entrepreneurship, and Commercialization at Georgia Institute of Technology.

The witnesses testified that while the globalization of R&D is not a new phenomenon, but that low-cost countries, such as India and China, have recently become able to attract a significant share of

STEM-intensive facilities and jobs. Product localization, government pressure, proximity to key customers, lower costs, and supply of high-quality low-cost STEM workers are some of the key factors that have attracted companies to India and China specifically. There was some disagreement of the relative importance of each of these criteria, but the witnesses concurred that government data tracking the location and function STEM facility investments are highly limited. Most believed the commanding lead that the U.S. has traditionally enjoyed in R&D investments is being challenged in new ways by low-cost countries. They also pointed out that the competition from developing countries for R&D facilities has ratcheted up competition for advanced technology facilities by other developed countries.

The fourth, and final, hearing was held by Chairman Wu before the Subcommittee on Technology and Innovation on November 6, 2007. This hearing explored the impact of the globalization of innovation and R&D on the American science, technology, engineering and mathematics (STEM) workforce and students. Witnesses discussed the new opportunities and challenges for workers created by globalization, including how globalization is reshaping the demand for STEM workers and skills. The witnesses also addressed how offshoring is affecting the STEM workforce pipeline and how incumbent workers are responding to globalization.

The hearing witnesses were: Dr. Michael S. Teitelbaum, Vice President of the Alfred P. Sloan Foundation; Dr. Harold Salzman, Senior Research Associate at the Urban Institute; Dr. Charles McMillion, President and Chief Economist of MBG Information Services; Mr. Paul J. Kostek, Vice President for Career Activities of the Institute for Electrical and Electronics Engineers-USA; and Mr. Henry Becker, President of Qimonda North America.

The witnesses testified that an increasing number of U.S. STEM jobs are tradable and thus vulnerable to offshoring. In some cases, that vulnerability has made STEM fields less attractive to students and has made incumbent workers more pessimistic about future prospects for their careers. Incumbent workers are worried about determining whether their jobs are easily out-sourced but face a void of information.

The witnesses said there is no systemic shortage of STEM workers and that a policy response aimed at producing more scientists or engineers, at least in traditional disciplines, is misdirected. Instead, the key is to create a system that produces the right kinds of STEM workers at the right times and ensures that STEM jobs are attractive. This response to globalization would help to address employer complaints about not having enough American workers with the right sets of skills while avoiding a glut of disaffected STEM workers. The witnesses also concluded that education offerings, including continuing education and distance learning, have not kept up with the needs of incumbent workers and employers.

Committee Findings

The globalization of innovation and R&D is increasing in scale and scope. It is a major structural shift making significant impacts on the key components of the U.S. science and engineering enterprise, and as a result it has important implications for the economy

and national security. Many of the developments are still unfolding, making it more difficult to predict their impacts. For instance, only very recently have low-cost countries, such as India and China, been able to attract innovation and R&D facilities. In response, top U.S. research universities are beginning a new aspect of internationalization by planning and building branch campuses abroad, often in low-cost countries. These are both radically new types of structural changes to the U.S. research enterprise and no one is able to model or predict their likely effects.

Policies focusing on improving U.S. science and engineering workers, education, and investments are critically needed to respond to the globalization of innovation and R&D. Witnesses at the Committee's hearings agreed that the data currently collected are woefully insufficient and inadequate to help policy-makers, the private sector, educators, and individuals make good decisions. The shifts are happening very quickly putting a premium on timely data.

There was some disagreement at the hearings about the potential future scale and the scope of offshoring of science and engineering jobs. In his research, Alan Blinder estimates that most STEM jobs are vulnerable to offshoring. Others, such as Ashok Bardhan and Cynthia Kroll from the University of California, Berkeley, have found similar results. Martin Baily said that while he agrees that an increasing share of STEM jobs will become vulnerable, believes that the number of jobs offshored will be smaller and speed of the transition will be relatively slow—enabling U.S. workers ample time to adapt.

There is also disagreement among experts about the characteristics of the jobs that will be vulnerable to offshoring. Dr. Baily asserts that lower wage, lower skill jobs as well as jobs that are easily automated are most vulnerable. Dr. Blinder asserts that there is no correlation between vulnerability and wage or skill level, but rather that other characteristics like whether a job requires face-to-face contact are more important. Other witnesses point out that many very high-skill R&D jobs are in fact moving or are being created in China and India. The characteristics of vulnerable jobs are critical to identify since educators and workers are being advised to focus on less vulnerable occupations and skills. However, they may be making bad bets if the model they are using for decision-making is inaccurate.

There was also contention about globalization's expected effects on the U.S. economy and workforce. Globalization is often confused with theories of free trade. The shifts in the production of goods and delivery of services overseas often result in changes in productivity in sending and receiving countries. These productivity changes are not necessarily benign and can actually harm the sending country. They are not the same thing as free trade. The witnesses disagreed about whether the effects would be harmful or helpful to the U.S. as a whole but did agree that some workers and firms would be harmed. As a result, all supported increasing the safety net for workers with programs to improve unemployment insurance, retrain incumbent workers, offer trade adjustment assistance, and ensure portability of health and pension insurance. They also agreed that greater investments in K–12 education and R&D

would be helpful, but some felt that this was insufficient saying that much more needed to be done to attract and retain high-wage jobs.

The U.S. remains an attractive place to perform R&D and innovation. It has many attributes—top research universities, a talented workforce, and a large consumer market—to attract and retain R&D and innovation work. But some witnesses, including Ralph Gomory, asserted that the globalization of innovation and R&D is rendering obsolete the conventional notion that investments in R&D lead to localized spill-over benefits. Others suggested that the U.S. should be focusing more efforts on assimilating innovative technologies developed overseas, though some disagreed with this premise. They instead asserted that the localized (or national) payoff from R&D investments will continue to be large and increasing those investments should be a centerpiece of U.S. policy.

Many countries are using policies to attract R&D and innovation work and there is clear evidence that these activities are moving to low-cost countries. U.S. multinationals have been rapidly ramping up their engineering and R&D ventures in India and China. The type of work does vary by country, however. Witnesses testified that the R&D in China tended to be more oriented towards product localization, developing products for the local Chinese market whereas the R&D in India tended to be focused on reducing costs and time-to-market for products intended for the global market. The conceptualization and design of new products, strategic research planning, and product roadmapping has mostly remained in the U.S.

The current status and expected trends in offshoring of jobs vary based on occupation, skill set, industry sector, intellectual property regime in the destination country, and a myriad of other factors. For instance, the information technology services sector has built up very substantial head count in low-cost countries in a short period of time, while the pharmaceutical industry has been slower to do so.

India and China are aggressively pursuing R&D and innovation based investments and jobs and have been successful at attracting a number of companies. Policies vary across countries, but some examples include tax incentives, capital-oriented grants, export subsidies, and maintaining an under-valued currency. Also, China particularly uses governmental pressure, either informally or by tying a firm's access to the market to technology transfer or the establishment of an R&D center in the country. A few hearing witnesses, including Robert Atkinson, identified these practices as mercantilist and unfair trade. The witnesses alleged that most of the instances of forced technology transfer and licensing are done through informal back-room negotiations rather than formal policies. Multinational firm executives will not speak publicly about these coercive tactics because they fear retribution and retaliation. However, there are some documented instances of forced technology transfer in the electric power, automotive, and aircraft sectors. In a recent report prepared for the Small Business Administration (SBA), one of the witnesses, Charles McMillion, describes some of these instances. In the electric power sector, McMillion cites a *Wall Street Journal* story about General Electric being re-

quired "to form joint ventures with the state-owned Chinese power companies. GE was also required to transfer to their new partners technology and advanced manufacturing guidelines for its '9F' turbine, which GE had spent more than a half billion dollars to develop."[1,2] His report also cites aviation industry experts David Pritchard and Alan McPherson, who conclude that, "There is no doubt that suppliers are expected to transfer technology to their Chinese out-sourcing partner or offshore facility that will be utilized for China's mission to develop its own large commercial aircraft (twin-aisle)."[3] In the automotive sector, "since 2004 China requires that each new auto production facility be accompanied by a new or expanded R&D center."[4]

The U.S. higher education system is a principal source of America's preeminence in STEM fields. As STEM offshoring increases, the response by higher education is critical. The July hearing explored two types of responses by American universities. First, what are the universities doing to modify curricula to help their STEM students better compete internationally? Second, how American universities are globalizing by building programs and campuses overseas to serve the growing demand from foreign students? The witnesses described some efforts targeted at curricula changes for domestic STEM students, but there was great interest by American universities to establish overseas branches and programs. The university representatives agreed that by becoming more global, the universities would become more competitive, raising standards and quality, and all students would reap benefits from a faculty that was more globally oriented and opportunities to study abroad.

There was also a strong consensus that the globalization of American universities is just beginning and is almost certain to grow rapidly as many top U.S. research universities seek to be global institutions. Data on how many American universities have branch campuses and programs abroad are poor.

The motivations for globalizing are manifold, and the actual decision-making is highly customized to a company's situation. However, U.S. national and/or local interests are only an indirect part of the equation. While it would be ideal if the globalization of universities yields better outcomes for the U.S., especially the STEM workforce, the potential impact has not been studied nor is it considered a critical decision point. Mark Wessel, a witness at the July hearing, did discuss possible detriments to U.S. students saying, "As universities become more global, we are effectively, if unintentionally, increasing the capacity of firms and individuals abroad, to do jobs currently done here in the United States." He went on to say that he believed that the net benefits would far outweigh any costs.

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[1] Charles W. McMillion, "China's Soaring Financial, Industrial and Technological Power," project report prepared for U.S. Small Business Administration, p. 9, September 2007.

[2] "China's Price for Market Entry: Give Us Your Technology, Too—GE Shares Generator Plans To Win $900 Million Deal; Gray Area in WTO Rules Kathryn Kranhold, *The Wall Street Journal*, February 26, 2004, as cited in McMillion.

[3] Charles W. McMillion, "China's Soaring Financial, Industrial and Technological Power," project report prepared for U.S. Small Business Administration, p. 31, September 2007.

[4] *Ibid*, pp. 37–38.

[1] Charles W. McMillion, "China's Soaring Financial, Industrial and Technological Power," project report prepared for U.S. Small Business Administration, p. 9, September 2007.

Incumbent STEM workers and students are concerned that globalization will negatively affect their career prospects. There is widespread support for improving K–12 science and math education, but significant disagreement about whether there is, or will be, a shortage of U.S. STEM workers. However, there is no evidence that U.S. STEM shortages, if they exist, are causing firms to offshore work. Incumbent STEM workers are concerned that policy is overly focused on the pipeline and hasn't spent enough time addressing under-utilization of incumbent and experienced workers.

Issues and Policy Recommendations

Ensure That America's Capacity to Innovate Is Fully Funded

There was consensus that the types of programs authorized in the *America COMPETES Act* are a significant and important step towards ensuring America's continued competitiveness in the face of rising competition in STEM intensive sectors.

1. Fully fund the *America COMPETES Act* to ensure the U.S. is investing sufficiently in science and engineering research, and STEM education from kindergarten to graduate school and postdoctoral education.

Unleash America's Best and Brightest Minds to Address the 21st Century Competitiveness Challenge

There is consensus that America faces major challenges to its capacity to innovate and its leadership in STEM sectors. These challenges, which will be difficult to address, are still evolving. They will require long-term, sustained, and wide-ranging responses from workers, companies, and the government. Programs need to be established to bring the best and brightest minds to help America navigate through these uncharted waters.

1. The National Science Foundation should establish a program studying the globalization of R&D and innovation and its effects on the America's capacity to innovate. The program will be interdisciplinary in nature and oriented towards policy effects. A symposium presenting results to policy-makers could be convened, with the program drawing lessons from the International Economic Policy Research conducted in 1981. Close collaboration between researchers and policy-makers would be required.
2. A Presidential Advisory Commission to provide advice on the implications of the globalization of R&D and innovation should be considered. The Commission would convene a symposium covering the current state of knowledge within three months of its establishment. Commission membership would include an equal representation of leaders from STEM worker groups and labor unions, business, and universities. It would have authority to order research studies and papers as needed, convene meetings, and issue interim or special reports at the Commission's discretion. A final report from the Commission could provide policy-makers with recommendations for action.

Collecting Additional, Better, and Timelier Data

There is a consensus that poor data has severely limited analysis of the globalization of innovation and R&D, thus hindering appropriate public and private responses. To remedy this situation, the National Science Foundation could work with the appropriate agencies within the Departments of Labor and Commerce to begin collecting additional, more timely data on the globalization of R&D and innovation. The broad-based effort would include a number of new initiatives.

1. The NSF Science Resources Statistics (SRS) Division should augment existing data on multinational R&D investments to include detailed STEM workforce data. This data could track the STEM workforce for multinational companies in the U.S. versus other countries. Details should include occupation, level of education, and experience. These data will be reported on an annual basis and in a timely manner such that the data are from the most recent fiscal year reported by the companies.
2. The NSF SRS Division should also collect detailed information on how much and what types of R&D and innovation activities are being done overseas.
3. The NSF Social, Behavioral, and Economic Sciences (SBE) Directorate should institute a research program identifying the characteristics of jobs that make them more or less vulnerable to offshoring. The program would include a study of estimating the numbers of jobs that have been lost to offshoring.
4. The NSF SRS Division should approximate the extent of U.S. university globalization. It could then track trends in university globalization.
5. The NSF SBE Directorate should identify the impacts of university globalization on the U.S. STEM workforce and students and institute a research program identifying and disseminating best practices in university globalization.
6. The Government Accountability Office (GAO) could conduct a study to identify the amount and types of U.S. Government procurement that are being offshored.
7. The Department of Commerce could implement recommendations from prior studies and reports to improve its collection of trade in services data.

Creating Better Career Paths for STEM Workers

STEM offshoring has created a pessimistic attitude among students and incumbent workers about future career prospects. The U.S. needs new programs to create better career paths for STEM workers including improved continuing education, a sturdier safety net for displaced workers, improved labor market and career information, an expanded pool of potential STEM workers that better utilizes workers without a college degree, and improved rates of successful re-entry into the STEM labor market after voluntary and involuntary absences.

1. The National Science Foundation should create a program to improve the adoption and use of low-cost on-line education targeted at incumbent STEM workers. The program would coordinate with the appropriate scientific and engineering professional societies. The pilot program could assess the current penetration rates of on-line education for STEM workers and identify barriers to widespread adoption.
2. The U.S. Department of Labor could work with the appropriate scientific and engineering professional societies to create a pilot program for continuous education of STEM workers and to re-train displaced mid-career STEM workers. The program could complete an assessment of the specific needs of STEM workers and the barriers to meeting them. This assessment would be made through a survey of STEM workers and scientific and engineering professional societies.
3. The NSF SRS Division should issue a report on improving the dissemination of STEM labor market signals, and begin reporting these data on a periodic basis. The report will assess the current state of labor market signals, and ways in which they may be distorted. The focus of the report would be on how workers and students receive information on the current and future prospects for specific STEM careers. The report will include the appropriate data from existing Department of Labor collections.
4. The National Academies could form a study panel to identify opportunities in STEM careers for students who do not go to college. This study would identify how many workers enter STEM careers without formal college degrees and the barriers for additional workers, without college degrees, to enter STEM careers. It could also recommend ways to overcome those barriers.
5. The National Academies could identify effective strategies for displaced STEM workers to more easily re-enter the STEM workforce. STEM workers are more likely to leave the workforce, voluntarily and involuntarily, for extended periods of time.
6. The Congress could extend Trade Adjustment Assistance to services workers since many STEM workers work in the services sectors.

Improve the Competitiveness of the Next Generation of STEM Workers

As universities globalize and multinational firms take the latest tools and technologies to STEM workers in low-cost countries, American STEM workers must find new ways to compete. They can compete by finding new opportunities and niches in the types of jobs and tasks that will remain geographically sticky to the United States. Those opportunities and niches for American STEM workers need to be identified. Entrepreneurship and innovation training have been identified as a comparative advantage for American STEM workers that are yet to be fully exploited.

1. The National Academies could form a study panel to identify the types of curricula reforms that are needed in response to globalization. The goal would be to ensure that U.S. STEM students graduate with the best skills to compete in the world.
2. The National Academies could also form a study panel to examine best practices in teaching innovation, creativity and entrepreneurship to STEM students.
3. The National Science Foundation should encourage expanded study abroad opportunities for STEM students to improve their ability to work in global teams and foreign language skills.

Review University Technology Commercialization Efforts

Witnesses pointed out that the statutes governing university technology licensing are outdated, inhibit university-industry collaboration, and need to be reviewed and revisited. As other countries invest more in their research universities, companies will have greater opportunities to partner with them. To ensure that U.S. universities are competitive, government policies on university technology licensing such as the Bayh-Dole and the Stevenson-Wydler Acts should be reviewed.

1. The National Academies could study the role of university technology licensing to inhibiting or accelerating the commercialization of technologies supported by federally funded research. The study would identify the various policies and practices that universities use to negotiate their technology licensing agreements.

Establish Tax and Trade Policies That Put the U.S. on Equal Footing for Attracting High-Wage STEM Jobs

U.S. tax and trade policies currently discourage investments in high-wage STEM jobs by companies. Changes should be made to tax and trade policies to improve America's ability to recruit and retain R&D and innovation facilities.

1. The U.S. Government could increase and extend the Research and Experimentation tax credit. The U.S. has fallen from first to 17th in its generosity amongst OECD countries.
2. The Department of Commerce could investigate "unfair" trade practices such as linking market access to a country with technology transfer, undervalued currencies, and theft of intellectual property.
3. The U.S. Government could reform the tax system to favor the creation high-wage jobs and disfavor the creation of low-wage jobs.